

# TRANSFER & STORAGE

TRANSFER AND STORAGE  
OF MERCHANDISE

MERCHANDISE  
DISTRIBUTION

MOVING AND STORAGE OF  
HOUSEHOLD GOODS

Vol. XVIII, No. 3

U. P. C. Building, 239 W. 39th St.  
New York, N. Y.

March, 1919



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U. S. Department of Agriculture.

## For City Streets and Country Roads

This new 3½ ton truck, like all the other Denby models, is built to meet the hardest conditions of service it may be called upon to face. The most rigid tests to which a new truck has been put, proved its ability.

- 1 Ton - \$1650
- 2 Ton - 2350
- 2½ Ton - 3000
- 3½ Ton - 4150
- 5 Ton - 4900

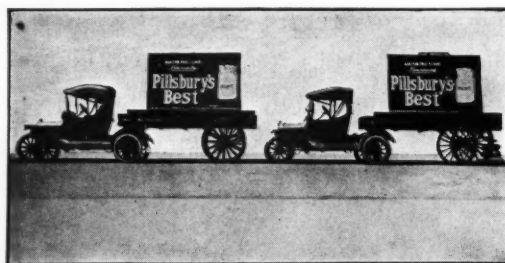
This unusually high standard of performance, to which every Denby must measure, is the basic reason for their unvarying dependability in urban, interurban or rural work.

The wide range of sizes gives the Denby owner a truck exactly suited to his needs.

**Denby Motor Truck Company,**

**Detroit**

# BILL KNEELAND BOUGHT A MARTIN



AND EARNED \$140 THE SECOND WEEK HE HAD IT. ITS  
AVERAGE WEEKLY EARNINGS ARE ABOUT \$75.00

AND THE TOTAL COST OF THE *COMPLETE*  
OUTFIT, AS SHOWN, WAS ONLY \$575.00

Bill Kneeland is one of Springfield's progressive truckmen. He hauled goods for many years the old-fashioned horse-and-wagon way. Then he learned of the Martin semi-trailer method of hauling, bought one of the outfits attached to a light passenger car, and now hauls his loads of 1 to 1½ tons 20 miles an hour, at a cost of about 6c a mile. He can send it 50 to 100 miles or more each day, every day in the week and on Sundays if he wants to do so.

Other equally progressive business men are finding out that the Martin semi-trailer method of hauling will enable them to buy motor outfits at a much lower price than the old-style conventional type of motor truck. These outfits are made in different sizes, from 1 to 10 tons capacity.

If you want to learn more about this latest and most economical development in the motor transportation field, send for our latest catalogue, full of interesting data about the savings that can be made, and the money-making features of the semi-trailer idea.

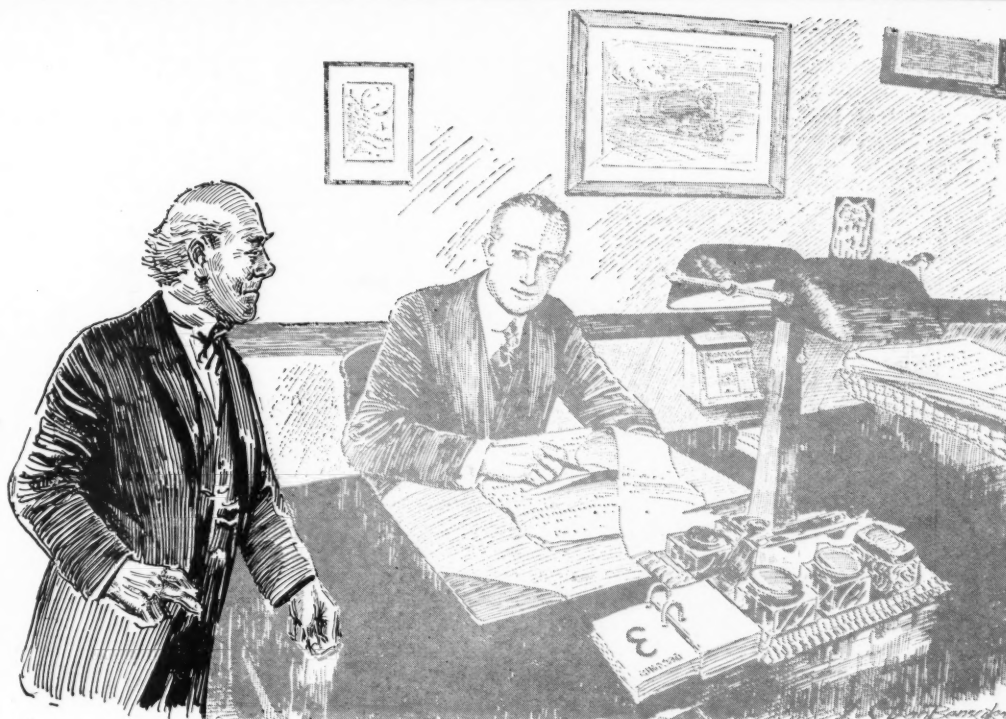
All Sizes—1 to 10 Tons Capacity

## Martin Rocking Fifth Wheel Co.

*Pioneers of the semi-trailer method of hauling*

Springfield, Mass.





## Bill O'Laden, Traffic Expert Delivers an Important Message

"ARE ye goin', Bill?" says Mister Dunham as I walked by his desk on me way from th' Bosses' room. "Do I appear to ye to be a stoppin'?" says I, kapen right on. "Hould a bit, Bill," he says. "So yer off!" "Wrong ye be, 'Household Goods,' yer off yersilf if ye thinks I've th' time to waste on ye th' mornin', but if ye'll be doin' yer wur-rk better, I'll inform ye I'm off fr' Boston, Buffalo, Philadelphia, Cincinnati, Seattle, Los Angeles an' Frisco, not to mention th' stop I do be makin' to Chicago to see President Bateman, an' the stop to Murphy's place to see a man, which I'll thank ye not to mention. Ye might see Murphy yersilf, I adds; he's goin' to move; there's a tip fr' ye me la-ad."

"Is Murphy goin' to move?" he asks. "Sure, on July 1st, when th' dhry wave knocks th' glass from th' hoary hand iv toil. But don't ye bother him, his goods ain't in yer line—at least 'tis I that hopes not fr' th' sake of th' Household Goods. So lave him alone la-ad, ivery man to his own job," I says. "My job now is startin' on me thrip, what's yours? Put down yer hat, that was no bid fr' ye to come to Murphy's place."

"What ye goin' after, Bill?" "Goin' after," I says, "inspiration fr' me lithrachoory articles fr' one thing, an' a small beer fr' another," I says. "Will ye deliver a message fr' me to our Boston office?" he says. "I'll not! Me time is taken up deliverin' an important message to all who ships Household Goods." "What is it?" he asks. "Ship yer goods the T-C F. CO. way. Truth 'tis a great message that, an' truth 'tis a great way to save both layboryous trouble an' good hard coin. Good-day, 'Household Goods,' 'tis goin' I be now."

"Hould on fr' a bit, Bill," he says. "Was yer up to th' fr-reight house last night?" "I was," I says. "An' did th' boys up there get loaded last night?" he asks. "Not as I know iv," I says. "When I left they was a handlin' th' fr-reight fine." "You don't get me," he says. "An' I'll not get me thrain if ye don't thrain yer mind on yer wur-rk and let me go," I says, an' away I wint.

Watch this space next month for a record of Bill's trip after lithrachoory inspiration. It will interest you just as our Booklet "Facts for Freight Forwarders" will. Better get your copy.

### TRANS-CONTINENTAL FREIGHT COMPANY

WOOLWORTH BLDG., NEW YORK

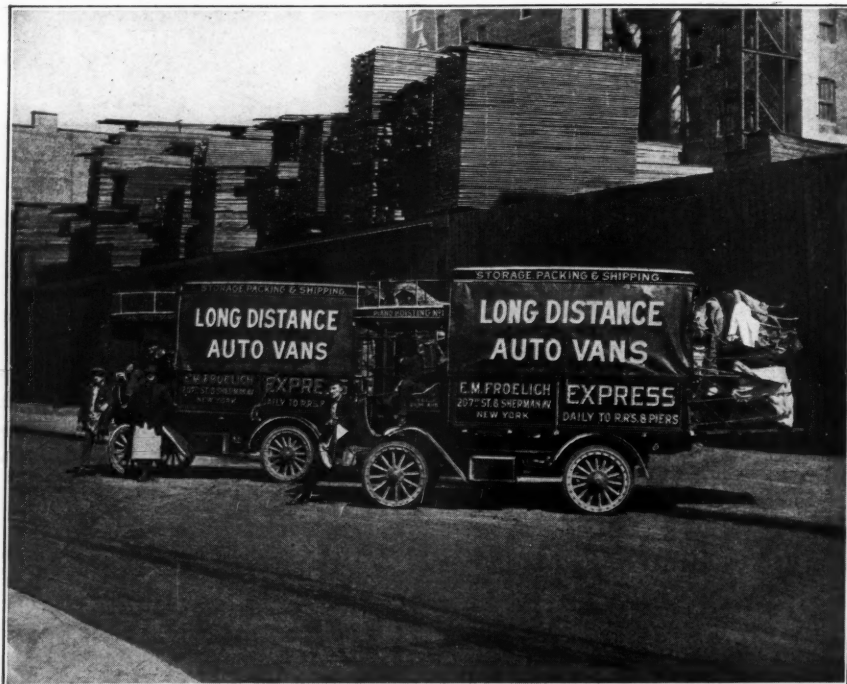
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## Two-ton Unit Makes Up in Quickness

Even the owner of big vans finds a smaller unit more profitable for many loads.

It is quicker and handier about city streets.

It is faster both with a load and without, over long or short hauls.

*And the service facilities offered Autocar users in New York deserve your investigation.*

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Ardmore, Pa.

Established 1897

New York, 549-555 W. 23d St., Brooklyn, 1026 Atlantic Ave.; Bronx, 2431 Grand Concourse; Newark, 418-20 Washington St.; New Haven, Conn., 159-63 Commerce St.

# Autocar

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

# TRANSFER & STORAGE

Established in 1902 as The Team Owners' Review

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PITTSBURGH.....437 Oliver Bldg. DETROIT.....527 Ford Bldg.  
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"JUDSON" CARLOAD SERVICE for LESS THAN CARLOAD shipments of Household Goods and Automobiles to the West, meets all requirements of the Government and the Railroads with reference to loading cars to fullest capacity.

"JUDSON" ships in FULL CARLOADS and wastes no space.

"JUDSON" SYSTEM besides moving more freight with less equipment, gets it to destination in BETTER CONDITION. Each article is loaded in a scientific manner, and is in precisely the same position upon arrival of the car at its destination that it was when loaded.

"JUDSON" offers this as but one of the many excellent reasons why shippers should avail themselves of the BEST SERVICE for the transportation of their goods.

"JUDSON" service SAVES MONEY, wear and tear.

"JUDSON" respectfully ASKS YOUR ASSISTANCE in getting information on the subject to the man with goods to move.

"JUDSON" gives positive assurance that all inquiries will be promptly and cheerfully replied to.

"JUDSON" appreciates past favors and earnestly solicits your further co-operation.

*For information write nearest office*

**Judson Freight Forwarding Co.**



*"Return loads will cut  
your haulage costs."*



*Another*  
**FEDERAL**

*This load was hauled  
overland from Providence  
to Boston by  
J. E. and C. B. Deignan's Federal, of  
Providence.*

## The Federal Never Stops to Rest

Heavy loads that would work a hardship on any team of horses and could even be classed as a cruelty, are handled with the utmost ease, and without delay by the concerns that have installed Federal trucks.

Where teams would be required to make several trips, Federals can handle the whole bulk in one load. Where the horses need a stop for breath at the top of a hill, or on a long suburban haul, the Federal delivery speeds right along in spite of road conditions, and regardless of distance.

These are facts that the business man who still clings to horse delivery must look squarely in the face sooner or later.

"Traffic News"—a magazine for the truck owner and buyer—will be sent to your address if you will write us.

**FEDERAL MOTOR TRUCK CO.**  
57 FEDERAL STREET      DETROIT, MICH.

# FEDERAL

*One to Five Ton Capacities*



# TRANSFER & STORAGE

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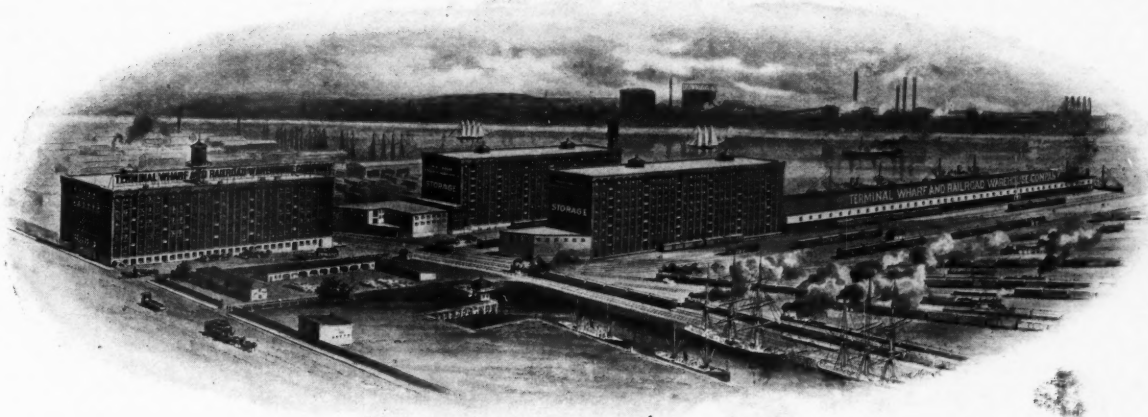
Volume XVIII

NEW YORK, MARCH, 1919

No. 3

## Big Field for Warehouse Expansion If Public Needs Are Studied

*Establishes Business As a Service Proposition  
To-Day Operates Plant Valued at \$2,500,000*



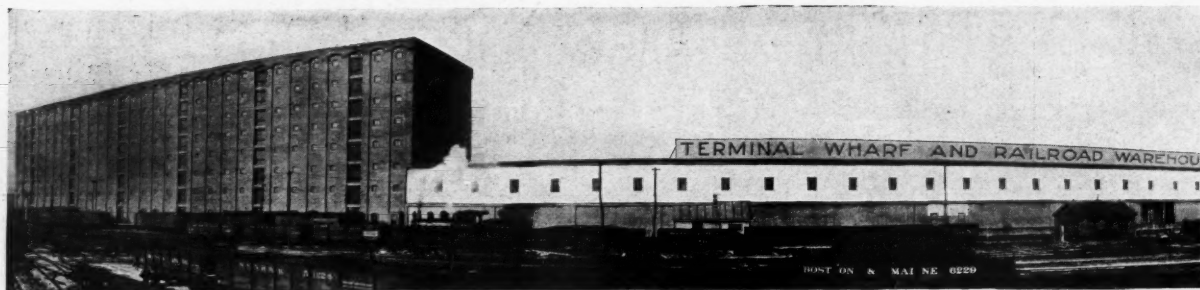
*View of the warehouse, dock and railroad facilities of the Terminal Wharf & Railroad Co., Boston, Mass. It has a capacity of 725,000 sq. ft. of space*

THE wonderful opportunity the merchandise warehouse business offers to those who are progressive and who are willing to study the needs of the public is demonstrated by the success of a Boston warehouseman who established the first private enterprise in that city—combining warehouse and dockage facilities. This warehouseman started business in 1908 with a capital of about \$25,000, with which he constructed a covered dock 800 ft. in length. And through his good business methods which involved the study of how to expand his activities, thereby making the undertaking a service proposition, the company of which he heads now operates two nine and one eight-story fireproof building having a total capacity of 725,000 sq. ft. of floor space in addition to the dock, an expansion

in warehouse facilities valued at \$2,500,000 in less than 11 years.

This expansion was not phenomenal. There are similar opportunities in practically every city in the country for a progressive man who is willing to operate his business as a service proposition, and who can compute a rate on a scientific basis so that a portion of the overhead expenses will be charged direct to the class of work it should be, and not charged off to some other class. In addition to this, the progressive man should have sufficient vision to plan ahead whereby he will be able to meet conditions and not wait until everybody else has grasped the situation and made the necessary changes.

Heretofore the warehouse business was *not* looked



*In the foreground is shown Mystic Wharf—owned by the Boston & Maine Railroad—while in the background is the 800-ft. dock containing 90,000 sq. ft. of space and one of the Terminal company's warehouses. A large section of the dock has been allotted to a fumigation plant for the handling of cotton*

upon as a necessity by the manufacturer, the large merchant and the public in general. It was the general impression that such an activity was not for the man who was educated, and as the profits were low, few were interested. The fact was, a large part of the merchandise business was operated by men who could not be called progressive. There were few who looked for business other than from local concerns. Figures being foreign to many of them, they guessed at practically all rates computed. Naturally the income was small.

But within the last few years many changes have taken place in the merchandise warehouse business. Men who were progressive and who were educated to

specialize on definite lines have become interested. Enormous capital has been invested in attractive fire-proof buildings which are equipped with modern devices for handling the goods more efficiently. These progressive men not only went after the local business, but they proved to the manufacturer who distributes goods that they could handle his goods more efficiently and at less cost than the manufacturer himself.

In addition, these warehousemen studied their operating costs for each individual department so that they could compute a rate which would be fair to both the customer and themselves. Other warehousemen who were progressive constructed large plants on water fronts, dredging channels on each side of a dock and into the river so they would have adequate facilities to handle import and export trade. Besides this, various kinds of equipment has been installed for handling goods that needed special attention, such as re-conditioning boxes, barrels, fumigation plants for cotton, etc.

#### Progressive Men Expand Activities

As one illustration that there is an opportunity for the progressive warehouseman, the City of Boston, for instance has fifteen public household goods and merchandise warehouses, some of which specialize in handling of one commodity such as tea, leather, cotton, tobacco, etc., while others make a specialty in the handling of household goods, general merchandise and cold storage. The merchandise warehousemen of that city work together and co-operate with each other probably better than those in any other large city in the country. That is, one warehouseman will not take business from another who has special facilities and who can handle that particular class of business better than himself, but even with such co-operation Boston has been short of storage facilities for some years.

A progressive Boston warehouseman who realized this condition was H. H. Wiggins, who established the Terminal Wharf & Railroad Warehouse Co., in 1908, an enterprise especially adapted for the handling of imports and exports and a large portion of the New England mills distribution business. The heads of the company owned about 25 acres of land in the Charleston section on the Mystic River waterfront. They studied the warehouse conditions in that section and came to the conclusion that if they constructed a warehouse with dockage facilities with a channel of sufficient



*Thirty-six whip hoists are used by the Terminal company, one at each section of the warehouses. Here a wagon is shown being loaded with exceptionally heavy goods by utilizing the whip hoist*



*Mr White.*

# **CORRECT MARKING OF EXPRESS SHIPMENTS**

**Official Classification  
Rules for the Guidance  
of Expressmen.**

**American Railway Express**



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## Here Is Rule 30, Official Express C

### Rule 30. Marking Requirements:

(a.) Each package, bundle or loose piece in a shipment must be plainly, legibly and durably marked, showing the name of only one consignee, and of only one station, town or city and state to which destined.

(b.) Shipments wrapped in paper, or packed in boxes, crates, barrels, corrugated paper or fibreboard containers must be marked with pen, brush, stencil, waterproof crayon, or by label securely attached with glue or equally good adhesive. Such shipments must not be accepted when marked only with tag except as provided below:

Shipments of iced goods, such as fish, oysters, etc., must be marked with brush, stencil or waterproof crayon, or with two tags securely tacked, one of which must be sunk in a groove in the box or case, or otherwise protected in such manner as to prevent becoming detached or defaced by contact with other articles or surfaces.

Containers which are customarily used several times for transportation of goods by express, such as bread boxes or dog kennels, which cannot be satisfactorily marked with brush, stencil, waterproof crayon or label, may be accepted when bearing two address tags securely attached to the package.

### (c.) Castings, Machine Parts, Shafting, Pipe, Rods, Bars and Other Metal Articles:

1. When boxed, barreled, crated or trussed, must be marked in compliance with paragraph "(b.)."

2. When not boxed, barreled, crated or trussed, and there is sufficient smooth surface for the purpose, the address must be plainly marked on the article with durable paint. Such shipments must not be accepted unless marks are thoroughly dry.

3. When not boxed, barreled, crated or trussed, or when not possible to mark as provided in preceding paragraph, shipments must be marked with not less than two wooden, leather, metal, cloth, rope stock or sulphite fibre-tag-board tags. Rope stock or sulphite fibre-tag-board tags may be either wholly of sulphite or rope stock or a combination of both, must test not less than 14 point, have reinforced metal eyelets and must be attached by wire not less than 23 gauge, or strong cord. Tags must be attached wherever possible to unexposed parts of the article in order that they may not become detached in handling.

4. When tags are used for marking Rods, Shafting, Bars, Pipe, Iron Bedsides, Automobile Springs and other articles of like character, shipped singly or in bundles without packing, there must be two tags, conforming to specifications of paragraph "3"; both

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Start Express Shipments Right—See That They A

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## ss Classification—Read It Over Again!

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tags securely attached to the article by wire not less than 23 gauge or strong cord; one tag to be concealed by being bound to the article with a burlap covering, the latter securely fastened at each end.

5. When metal articles are shipped in sacks, the address must be shown on tag conforming to the specifications in paragraph "3," attached either by wire or strong cord, and an additional tag bearing the same address must be enclosed in the sack.

(d.) **Trunks, Suit Cases or Valises.**—Must be marked with one strong tag and have an address label pasted on the bottom in addition thereto before forwarding. Shippers should place a duplicate address inside of these articles for the purpose of identification.

(e.) **Automobile Tires.**—When not boxed or crated, must have two marks, both to be attached to the inner surface of the package, bale or tire, and to consist (1) of a strong tag securely attached, and (2) another tag bearing the same address, securely bound by burlap or cloth, or an address label pasted on the inner surface.

(f.) **Bedding, Carpets and Rugs.**—When not boxed or crated, must be sewed up in burlap or some other substantial cloth covering, and marked with stencil or brush; such shipments must not be accepted when marked only with tag. Shippers should place duplicate address inside of the bale for the purpose of identification.

(g.) **Nursery Stock and Trees** in bundles or bales must be marked with not less than two tags, securely attached, and when in bales, shippers should place a duplicate address tag inside the bale for the purpose of identification.

(h.) **Household Goods and Furniture** which, under individual items, may be accepted when not boxed or crated, must be marked by not less than two tags securely attached to each piece.

(i.) **Lot Shipments.**—Except when in carloads, each package or article in a lot shipment must be marked in compliance with these requirements.

(j.) Shipments not marked in accordance with the foregoing requirements, or as noted under individual items of the Classification, must be refused.

**Milk and Cream.**—Cans must be permanently marked with owner's name by paint, embossing or metal plate and in addition must be plainly marked by an address tag securely fastened to the can. (Item 26, page 27, and item 23, page 34.)

**Meat.**—Dressed carcasses or parts thereof when not packed in outside containers must be completely covered with cloth or burlap and marked with stencil, brush or label or with not less than two tags securely fastened to the covering. (Item 15, page 34.)

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## They Are Marked According to These Regulations!

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**You, Mr. Expressman,**

are responsible for the enforcement of these established Marking Rules. They are worthless if you do not put them into effect.

You, wagon men and receiving clerks, can safeguard the interests of the shipper, the company and yourself, by not accepting any shipment incorrectly or insufficiently addressed.

This is *your* responsibility in the matter—*Do not dodge it!*

Yours for Better Service,

**American Railway  
Express Company**

depth for large steamers, the undertaking would be a paying proposition.

The company at first invested a capital of about \$25,000 which was used toward the construction of an 800 ft. dock and for dredging a 30 ft. channel alongside of the dock and out into the Mystic River to meet the channel dredged by the Government. The dock was a covered affair so that it could be used for storage purposes, having a floor space of 90,000 sq. ft. Besides having facilities for receiving and delivering goods to steamers, three sidings connecting with the Boston & Maine Railroad ran the full length of the dock, two tracks on one side and one on the other, giving the dock a total capacity of receiving sixty freight cars.

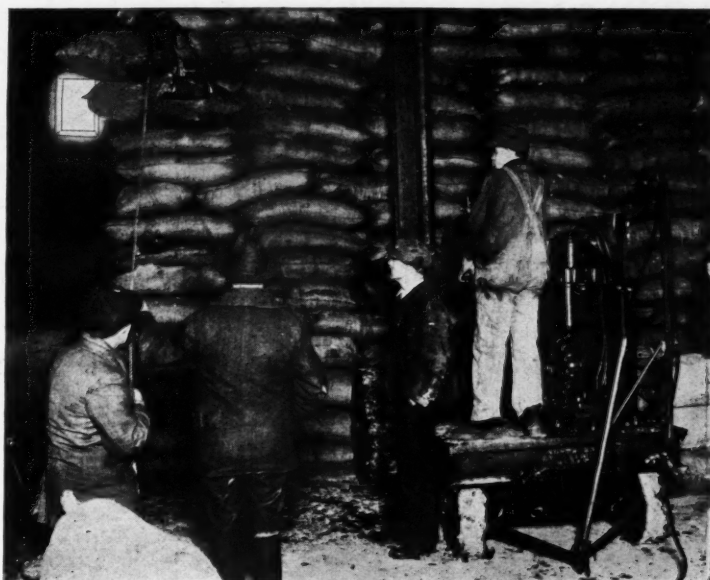
#### Handles Quantity of Raw Sugar

During the first year, the company started by handling general merchandise in carload lots, this work being accomplished to the satisfaction of the customer, and having such excellent facilities it was able to secure a contract with a large sugar refinery for the handling of its raw sugar. This class of storage proved to be very beneficial to the company as it handled over 60,000 tons of raw material the first year.

In 1910, when the company had been in business two years, its activities had increased to such an extent it was impossible to handle the business efficiently unless other facilities were secured. Besides, there were several manufacturers who were looking for warehouse space in that section. The heads of the company got in touch with those desiring space and were able to secure contracts for the leasing of approximately 275,000 sq. ft. of floor space for a long term. This space was leased out to the manufacturers on conditions similar to those under which they would have constructed their own plants.

#### Secures Contracts, Then Builds

After these contracts were secured, the warehouse company constructed a nine-story building containing 400,000 sq. ft. of space, directly in the rear of the dock. Although the company only leased out about two-thirds of the latter plant to manufacturers, thus



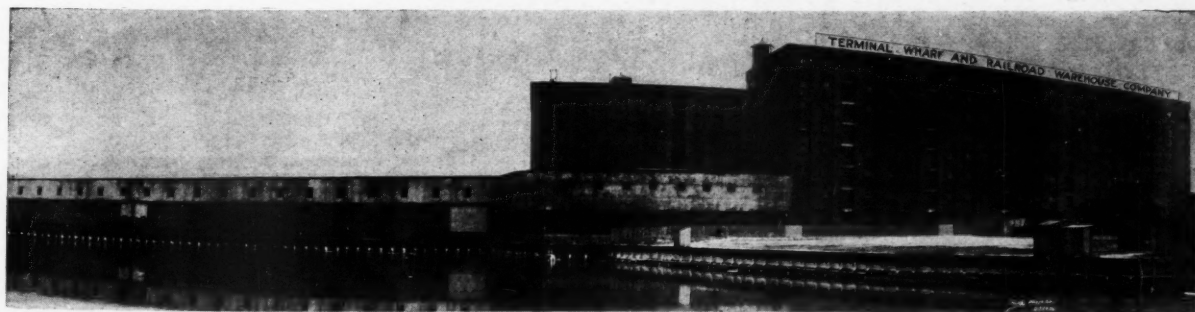
Seven electrically-driven cranes are used at the dock to enable the company to stack heavy goods within a 20-ft. height. The cranes, which were constructed especially for the company, cost \$3,000 each

leaving approximately 125,000 sq. ft. of space for its own use, it only served the company's needs until 1912, at which time another nine-story fireproof building having a capacity of 180,000 sq. ft. was constructed, the latter being used principally for the storage of leather, wool, cotton, paper and miscellaneous merchandise, all of which was received in carload lots.

#### Constructs Cotton Fumigation Plant

The New England States comprise the largest cotton manufacturing district in the country. In fact, over 80 per cent of the country's supply passes through that section. This was one of the lines that the company paid particular attention to. In doing this not only was it able to work the cotton storage up to enormous activity, but those in charge made a study of the best method of handling this commodity in the most efficient way. It installed every known device which was adaptable for the handling of cotton economically.

The law in respect to foreign cotton stipulates that none shall be brought into the country and distributed



A view showing the opposite side of the dock and another one of the company's warehouses. At this building practically all classes of general merchandise are handled, all goods being received in carload lots. This plant, which was the second one constructed, contains approximately 180,000 sq. ft. of space



*A large section of the dock is allotted to the storage of cotton and other goods that can be piled 20 ft. high. Here is shown how bales of cotton are stacked*

until it has first been put through a fumigation process, to kill the pink boll worm which is found in practically all foreign cotton. The reason for this is that the pink boll worm destroys the cotton, and where it gets into cotton plantations it ravages the greater portion of the crops. Hundreds of thousands of dollars have been spent by the Government to keep this worm from getting into the crops and causing devastation.

This shows the importance of having the necessary facilities at a warehouse that is located on the waterfront and which handles imported cotton. To handle this class of storage and to receive the cotton direct from the steamer, the Terminal company installed a fumigation plant valued at many thousands of dollars and which is said to be one of the largest in the country.

#### **Can Fumigate 1000 Bales of Cotton Daily**

The plant operated by the Terminal Warehouse is composed of four large cylinders which have a capacity of fifty-two bales at one time, or a total capacity of 1,000 bales per day. These cylinders, with the other necessary machinery, such as motors, pumps, tanks, etc., are in a specially constructed house inside the dock. The cylinders are made air tight after the cotton is placed in them and a high vacuum of approximately 26 lbs. pressure is taken, after which cyanide gas is fed into the cylinders. The gas is left in the cylinders about 2 hours, when it is withdrawn in the tank in which it is stored, and oxygen pumped back into the cylinders before they are opened.

The fumigation plant was designed by the heads of the company, and is said to cost more than any other in the country. It is a plant that few would undertake to establish unless they were sure of getting an enormous quantity of cotton. An expert chemist and an assistant is employed to make the test and operate the machinery. These men are especially trained in their work and are employed the year around. Were the men not experts in their work or careless hands employed, and the gas generated before the proper time one breath of the gas would cause the death of the men working around the machine and cylinders.

After the cotton is put through this process it is stored in either one of the warehouses or at the dock. The ceiling of the dock has a height of 25 ft., therefore these goods can be piled within a height of 20 ft. The work of stacking these bales is accomplished by an electrically-driven crane which was manufactured especially for the company. The accompanying illustration on page 7 shows this crane in operation. Seven of these cranes are used, the cost of each being \$3000.

With the construction of the two buildings and the dock, this brought the company up to 1914 during which time many manufacturers were looking for space in that section to produce their product. In this, the heads of the company did as before when they constructed their first building. They secured contracts from the manufacturers to partly fill a good size plant, after which an eight-story building containing approximately 200,000 sq. ft. of space was constructed, practically all of which was occupied as soon as the building was completed. The company owns a tract of land composed of 25 acres on which it will construct buildings of any size for any manufacturer or merchant who desires such a plant and who does not wish to invest the capital himself. That is, provided the manufacturer will take a long lease. This business the company intends to expand quite extensively within the near future.

The company has installed every practical known device for the efficient and economical handling of goods whereby it can reduce its labor costs to a minimum. Every section of its warehouses is equipped with elevators, alongside of which is a Howe scale. In addition to this the company also employs electric whip hoists in each section of its three buildings, giving a total of thirty-six hoists. This device is so constructed that it will operate two whips, one on each side of each section. The mechanical apparatus is installed in an especially constructed house located at the top floor center. Each of these whips are controlled by a switch at the door of each floor, and by a control rope which extends from the top to the first floor. This rope controls both the up and down movement of the lift rope. For instance, one pull on the rope and the hoist will descend, another pull and it will stop. The operation for the upward movement is the same as that of the downward with the exception that the rope is given a greater pull.

The latter undertaking of the company, that is, the constructing of a building and leasing it to manufacturers, proved to be as successful as those of other projects which were undertaken by the Terminal warehouse. The first few years the company was in business the income derived from the storage and handling departments was not as large as it should have been, but it was not long before those in charge soon arrived at this conclusion. At first the heads of the company thought they were receiving a good rate for this work, but after making a thorough study they concluded they were actually losing money in both the storage and handling departments. The reason for this was they did not charge off their investments or figure in their overhead costs. But during the past 2 years a complete change has been made by that company in computing all rates, the system now

*(Continued on page 14)*



# REVIEW OF THE INDUSTRY

## *80 Per Cent of Merchandise and 65 Per Cent of Household Goods Space Is Occupied — Good Demand for Merchandise Storage*

**D**URING the month of February there was a raising market throughout the country for general merchandise storage space. Reports from seven large cities in the industry show that 80 per cent of the merchandise warehouse facilities are being utilized, an increase of about 10 per cent over January. In the household goods branch, only 65 per cent of the warehouse space is being utilized, a decrease of about 5 per cent. In the cold storage warehouses, the conditions are about the same as last month, or about normal. There is plenty of labor in all sections, but some localities report this labor to be very inefficient.

Only 65 per cent of the waterway warehouse space was utilized during the month of February, a decline of 15 per cent. This condition was due to the enormous amount of goods being removed from these plants for overseas shipment. Most of this material has been stored at these waterway warehouses during the course of the war. Of the inland warehouses, there was a rising market for space. In fact, in many sections there is little more than working space, so big has the demand been. Ninety-five per cent of the storage space of these plants is occupied, a condition similar so that of last month.

### **Kansas City Warehouses Filled**

Practically all merchandise warehouses in Kansas City, Mo., are filled to capacity, a condition that has existed for some time. Kansas City is one of the largest distributing centers in the country, and, while the warehouses have been able to handle all goods coming to their plants, they have been hampered to a certain extent during the past year in their distributing business on account of railroad conditions. This is one of the reasons for such a large amount of goods still being held in Kansas City.

The business of the household goods warehouses has been depleted in both January and February. As is the case in many other cities, this is the dull season, but more especially on account of the return of the soldiers who have families. These goods are now being taken and are leaving a vacancy of about 14 per cent of the space. In that city there has been a falling market in the household goods warehouses during the past 2 months.

In Kansas City it has been impossible to secure trained warehouse labor. However, in the household goods plants there is sufficient for this dull season. A problem with the merchandise warehouseman almost as exasperating and cutting in business has been the railroad situation which has been and still is bad.

In St. Louis, Mo., the problems of the three classes of warehouses are practically the same, but for different reasons. At present all classes are seeking business.

The facilities of the merchandise plants are about 66 2/3 per cent filled, no present gain being looked for because consumption appears to be equal to production in most lines, and where one gap is filled with one product, another lot is taken out. This condition, of course, gives the warehouse a quick turnover, which should give a good income to the owners if they are basing their rates properly.

The household goods warehouses in that section are about 33 1/3 per cent occupied, and during the month of February most of the movement was outward. In this line there is a falling market and the prospects are not very bright for new business during the next month. This is a radical change from a few weeks ago, when practically all of the plants were filled to capacity. The reason for this is the soldier coming home withdraws his goods as soon as apartments or houses are available.

### **Demand for Storage Space in Denver**

The stocks in the cold storage plants are under those of recent years, due largely to withdrawals of fruit held for the winter, and butter and eggs during the recent efforts of speculators to get out from under a falling market. The labor in all branches is fairly satisfactory, but the greatest problem is how to get new business.

The three classes of warehouses in Denver, Colo., report favorable conditions and free from serious problems. While practically all merchandise warehouses report their plants filled to capacity, large stocks of sugar, potatoes and similar merchandise stored for the winter are now being shipped out, but even with these withdrawals other goods are being received which make conditions normal. The household plants also report a growing market for space. Heretofore the problem in that city has been labor, but during the past month there has been plenty of labor to pick from.

Approximately 93 per cent of the merchandise warehouse facilities in Boston, Mass., are now being utilized. And, even though the waterway warehouses have shipped large quantities of goods overseas during the past month, there has been no radical change. In the household goods business conditions are about normal. The greatest problem in the industry in that city has been the handling of labor, but during the past month the warehousemen have been able to secure plenty of efficient labor.

There is a rising market for space at inland warehouses and a falling market for space at the waterway plants located in or about New York. The figures for that city show that 95 per cent of space is being utilized at the inland plants and 65 per cent occupied at waterway ware-

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# ■ Editor's Page ■

## Peace Efficiency—War Time Economy

**I**S it necessary to construct my business from a war to a peace basis, and if so, where shall I begin? This is one of the most significant thoughts that has been uppermost in the minds of progressive transfer and storage men since the signing of the armistice, November 11, 1918.

The transfer and storage man who has been successful in business during the past two years has made many changes. For instance, he has operated his business nearer 100 per cent efficiency than ever before—he has made every hour of time and labor count for something productive, whether it has been in his clerical department, checking, packing, moving, stacking, handling goods in the warehouse or hauling household goods or merchandise within his own city or to other cities.

Each of these classes of work has been accomplished by a different method than that employed 'heretofore. There had to be a change because of the scarcity of labor, and the shortage of materials, and what labor was able to be had was not the same as was previously employed before the war. The price of the material that could be obtained was such that it was almost impossible to realize a profit unless economy was effected wherever possible.

During this time many transfer and storage companies had to refuse work because of this scarcity of labor, but even with this condition there were few transfermen who did not do more work, and who did not realize a greater profit than ever before. There were few household goods or merchandise warehousemen who did not have their plants filled to capacity and who did not receive a larger income on their investment than ever before.

How was all this accomplished—with less man power and less material? It was because the work had to be carried on. Therefore the transfer and storage man studied the best method of how to meet the public needs and at the same time increase his activities.

There is at present a need of another change, and that is from a war to a peace basis. In practically every line of business

those in charge are working toward one end. Our boys over there are coming back. Many have already been reinstated by their former employers. This is as it should be, but it must be borne in mind that in the process of transforming the activities of a company back to a peace-time basis war-time economy should not be forgotten. In other words, the transfer and storage man should not allow his business to drift back into the same anti-war rut.

There are many fields open to both the transfer and storage man where good profits can be realized. The transferman has an enormous field for expansion by utilizing his motor trucks to a greater advantage in the establishing of motor-truck and rural express lines in localities which are poorly serviced by rail.

The household goods warehouseman can also expand his business, there being many activities which should form a part of it. The activities which have been adopted by household goods warehousemen during the past few years, and which have given them good profits, are the purchasing of second-hand pianos, repairing them and then selling them at a profit ranging between 75 and 100 per cent. The carpet-cleaning business is another line that has been operated with much success. Still another line is that of the upholstering and the repairing of furniture.

In the merchandise warehouse business there is also an enormous field for expansion in the distribution of merchandise. This line is one of the biggest assets of the merchandise business if the warehouseman goes after it in the proper way. To do this he should call upon or get in touch with the various manufacturers distributing or utilizing warehouses in his territory. In developing this activity he should be equipped with statistics and other data to convince the manufacturer that with his facilities and men who have been especially trained in the warehouse industry, he can handle the business more efficiently and at much less cost than the manufacturer himself.

But with this enormous opportunity which is now before the transfer and storage man, it should not be forgotten that peace efficiency should also include war-time economy.

# How to Reduce Merchandise Handling Costs to a Minimum

## Spiral Chute Delivers Goods Direct to Shipping Platform— Effects an Economy of 20 to 50 Per Cent in Cost of Out-Going Freight

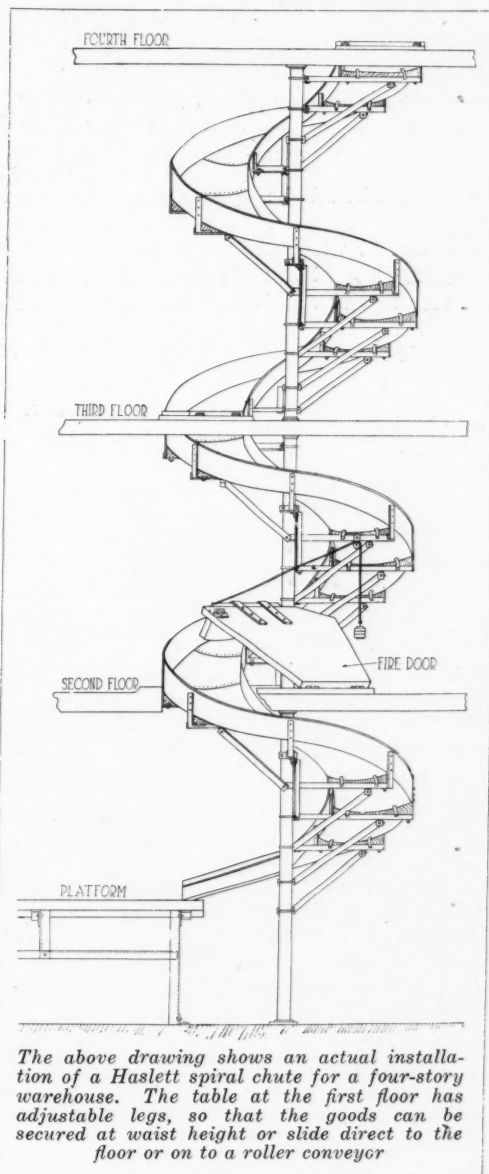
*Baltimore Warehouse Saves Time and Labor of Three Men—San Francisco  
Plant Handles 1400 Bags of Beans in One Hour*

THE handling of goods in an economical way between the upper and lower floors of a warehouse has been given much thought by the progressive warehouseman during the past year. There are two methods of handling such goods in a warehouse, one is by the elevator and the other by the chute. Each of these methods have their advantage over the other, this of course being governed by the conditions at the plant and the class of goods being handled.

The elevator is the most adaptable to a plant where the quantity handled is such it does not require speed or where the goods are of irregular shape, size or weight, whereas the chute has the advantage where large quantities of merchandise having some regularity in size and weight are handled, and where speed is necessary. In addition to this, there are four ways in which the chute is of advantage to the warehouse handling large quantities of goods.

First is the actual money saved in wages which would otherwise be necessary were the goods handled by the old method.

Second is the keeping of the shipping platform clear of wagons by getting deliveries to them more quickly, thus permitting the handling of a larger amount of freight in a given time and in a given



number of square feet of shipping space.

Third is the satisfaction to the customer in eliminating delays of vehicular equipment at the warehouse platform.

Fourth is the advantage of being able to make larger deliveries in record time in case shipments are desired at once. In all, the basis of these four advantages is, the chute gives the warehouse the necessary equipment whereby the warehouseman can realize a fair profit on his handling operations.

The progressive warehouse man of to-day is not the man who sits back, and employs twenty or thirty men to handle a certain quantity of merchandise by manual labor that can be handled with less manpower and in much less time by adopting some labor saving device. It is the warehouseman who installs such devices, suited to his particular needs who gives his customers efficient service and who realizes a larger profit than his brother warehouseman who is satisfied to continue business on the old method.

The spiral chute, a device for the handling of merchandise from the upper to the lower floors has been adopted by numerous progressive warehousemen. The success in the use of this device depends upon the adaptability of it to the character of the work done. When installing a chute





*A roller conveyor being used to handle goods between a spiral chute and a freight car. This work only requires the work of two men, one feeding the chute and the other receiving from the conveyor*

it should be borne in mind that one should be selected that will handle practically every class of merchandise up to a certain size and weight without too great a speed and without clogging, thus giving safety for glassware or other fragile merchandise. Of course, it would not be necessary to install a large chute which will handle a variety of goods if the warehouse specializes in the handling of uniform packages or boxes of two or three sizes and weights.

One of the largest warehouse companies in the State of Maryland is the Terminal Warehouse of Baltimore. This company operates seven large plants, four of which are allotted to the storage of flour, one to canned goods, another to general merchandise, while the other is given over to the handling of hay, etc., giving the company a capacity of approximately 560,000 sq. ft. of floor space.

#### **Baltimore Warehouse Utilizes Nine Chutes**

Every one of the Terminal plants with the exception of the hay warehouse is equipped with spiral chutes. The flour warehouse is equipped with four spirals and two straight chutes, the canned goods plant two spirals and the general merchandise also a spiral chute. Practically every one of these, especially those recently installed have proved eminently satisfactory to the warehouse.

These chutes are arranged for delivery purposes so as to discharge the goods to the tailgate of the wagons at the platform edge upon a table 2 ft. 6 in. high and equipped with collapsible legs. When this table is set in normal position the goods slide from the chute to approximately the center of the table which makes it convenient for handling large sacks of flour and other heavy goods at waist height. In addition to this feature, the legs at the end of the table furthest from the spiral are hinged and can be withdrawn so the table at that end can be lowered down to the floor making a slide of it of the proper

pitch for causing the goods to continue to the floor and to the edge of the shipping platform or to the tail board of the wagon.

At the wharf warehouse, where boxed goods (canned tomatoes, peas, beans, etc.), are handled, a spiral chute is arranged at one operating side of the warehouse in such a position that by coupling small sections of gravity conveyors at the bottom of it, deliveries are made to any one of the three freight cars at the sidings or direct into the lighters or barges at the other side of the warehouse. Where it is possible, the delivery of the chute should always be located near the shipping platform or where the goods are to be delivered to the vehicles, freight cars or barges. But where the chute is to serve more than one platform, the gravity conveyor will be found to be of great benefit in reducing the time and labor in handling package

goods from the chute to the various platforms. The gravity conveyor can also be used to advantage in the handling of the goods from the elevator to the section of the plant where they are to be stored. That is, if four-wheeled trailers are not in use.

#### **Chute Saves Three Men's Time**

The following is a statement made by one of the officers of the Terminal Warehouse Co. when asked as to the saving involved by the adoption of the spiral chute.

"As to the saving from chutes, our figures indicate that a 20 per cent saving in time and services of one man is effected in making deliveries to wagons, or when used at the Bond Street Wharf (the canned goods warehouse) for loading. When used at that warehouse for discharging to lighters or barges the services of three men are saved. The most recent installation are the Haslett Spirals which have proved eminently satisfactory."

The Terminal warehouse purchased two spiral chutes during the latter part of 1917 at a cost of \$5,000. One of the most important things of any chute is the speed at which the goods are sent from one floor to another and the speed at which they arrived at the bottom. Some of the chutes which were first placed on the market was designed so that if extra heavy goods were placed in a chute designed for light goods the speed of the goods became so great when they traveled any distance they were usually damaged when they reached the bottom. But the spiral chutes are now designed so that the speed of the heavy goods will be practically the same as that of the light.

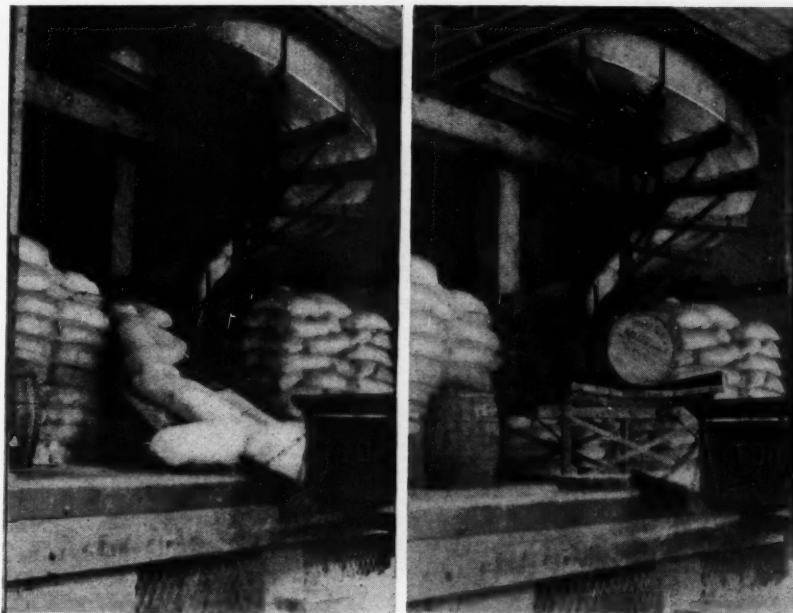
This was demonstrated by a recent accident at the Terminal warehouse. The men were handling a roll of 36½-in. newspaper weighing 600 lb. on one of the upper floors, when the paper rolled into the chute opening. The paper slid down the chute at about the

speed of a box of condensed milk and was found on the discharge table on the first floor in good condition when the men arrived.

In San Francisco many warehouses are using spiral chutes for the handling of a large variety of merchandise. The saving to the warehousemen in that city ranges between 15 and 50 per cent for their handling costs. Even with those who save the smallest percentage, it has not taken long before the device paid for itself.

One of the San Francisco warehouse companies having several buildings use spiral chutes almost exclusively for the handling of out-going merchandise. This plant has been able to save over 50 per cent in its handling costs. As an illustration, one of its warehouses was utilizing three elevators for both incoming and out-going merchandise, and finding this method involved much lost time, especially in the busy season when the elevators were kept busy almost continually, the company installed one spiral chute to handle out-going shipments. The efficiency of the chute was such that the warehouse found it necessary to operate one elevator instead of the three, the one elevator being used for incoming goods only, while the chute was used for all out-going shipments.

The advantage of the chute to this plant was 66 1/3 per cent reduction in the elevator service, which also



*This spiral delivers merchandise direct to the vehicle backed to the loading platform. A collapsible table is used so heavy goods can be handled waist high, or as a slide from the spiral to the vehicle*

meant a reduction in the number of men needed. In addition, the out-going shipments could be sent to the platform at a greater speed and at a reduced expense. The officers of this warehouse figured the chute effected an economy of over 50 per cent in the cost of out-going freight.

During the last few years speed has been looked for not only by the public in general, but by the Government also. As an illustration of the adaptability of the spiral chute for the handling of merchandise at the warehouse, the following statement has been received from a San Francisco warehouseman:

#### **Spiral Handles Large Shipment of Beans**

"An order was received at one of our warehouses late in the afternoon for the delivery of an enormous quantity of beans for export. The steamer was to sail at noon the next day and under normal conditions it would have been impossible to get the shipment out in time. We arranged, however, to have the wagons lined up at the warehouse at the opening time the next morning and the drivers of the waiting wagons to help those who were loading. The evening before the chute was filled up from the bottom to the floor on which the beans were stored. Porters were prepared to truck them continuously to the chute, from where they were delivered direct to the wagons. The beans were taken away at the rate of 1400 sacks an hour and shipment was gotten off in time. Had it not been for the chute it would have been impossible to make the shipment in the time allotted."

Another case of this kind where the chute demonstrated its value was at building No. 24 of the Bush Terminal, New York. This plant was commandeered by the Government and used for some time for the handling of emergency rations. The plant was equipped



*Receiving merchandise from a spiral chute at the Terminal Warehouse, Baltimore, Md.*



*Canned goods, after leaving the mouth of a spiral chute, are handled by gravity conveyor to a portable slide which delivers them direct to the floor of a scow or lighter tied to the Terminal Warehouse Company's dock*

with two spiral chutes which handled a daily average of 4000 and 5000 cases, weighing about 125 lb. each. Besides using chutes gravity roller conveyors were employed to divert the goods in various directions. Thus each spiral chute was able to furnish goods to two and three wagons at the platform and a lighter at the other side of the building all at one time.

These boxes were placed in the chute on the upper floors as rapidly as the porters could handle them with hand trucks, and at all times there was an accumulation of cases from the bottom of the spiral up for two or three and even four floors, one case resting against another and following down as they were taken away at the bottom. There was, in fact, a continuous stream of cases and as far as can be ascertained not one case was damaged in the hundreds of thousands that were sent out.

#### Several Size Spirals Marketed

Of course these chutes were especially adapted to the particular class of goods they were handling, which shows conditions should be studied before a chute is installed. As there are several sizes marketed, it should be borne in mind it is not necessary to install a large chute for the handling of small packages or a small one for a variety of goods. The following is a list of the different sizes of chutes and the dimensions, and the weight of the packages or boxes for which they

were ordinarily designed for by a well-known manufacturer of spiral chutes:

Diam.	Trough	Packages		Weight lb.
	Width	Length	Width	
	in.	in.	in.	
3 ft. ....	12	15	9	40
4 ft. ....	19	22	14	75
6 ft. ....	24	30	18	200
7 ft. ....	30	36	23	350
9 ft. ....	36	48	28	400
9 ft. 10 in. ....	42	52	32	600
12 ft. ....	48	60	36	1000
15 ft. ....	60	72	46	1400

In addition to these sizes, chutes can be constructed for especially heavy work. The approximate price of a chute may run as low as \$15 per vertical foot for the smallest size and as high as \$60 for the largest. The chutes used by general warehouses are 36-in. and 42-in. trough widths, and the approximate cost is estimated between \$30 to \$45 per vertical foot.

### Big Field for Warehouse Expansion If Public Needs Are Studied

*(Continued from page 8)*

being employed is that of the standardization of basis of rate making as worked out and adopted by the Massachusetts Storage & Warehousemen's Association, a part of which was compiled by S. G. Spear, treasurer of the Terminal Wharf & Railroad Warehouse Co. The complete report of this system as adopted by the American Warehousemen's Association was published in full in the January and February issues of TRANSFER & STORAGE.

Since the adoption of this new system, the company has found that it can compute fair rates for both itself and customer. After studying the various details involved in the operation of warehouse business, it was hard for the heads of that company to realize that such an activity could be operated with such an enormous loss, especially when those in charge believed they were making a profit. The rule now adopted by the Terminal warehouse is that no goods shall be stored or handled unless the rate is computed by the scientific method, the basis of which gives the warehouse a standard rate per cubic foot of floor space, and which will give the plant a certain income on its investment, all which goes to show that there is a wonderful future for the warehouseman who is willing to study conditions and who is willing to apply scientific methods not only in the handling of goods but in the computing of storage and handling rates, and who looks for the manufacturer's distributing business which will be the big end of the warehouse activity in the future. When this Boston warehouseman first started in business, he had an excellent conception of the general needs of the public and those who shipped goods to and from the Charleston section, but he did not have any idea that by studying and by making this enterprise a service proposition he would be able to increase his business to such an enormous extent in less than 11 years.



# Penn. Warehousemen to Establish Return Loads Bureau

## LARGE ATTENDANCE AT SECOND ANNUAL MEETING

THE decision to create a return loads bureau, thereby enabling the warehousemen and van owners to secure greater efficiency in his long distance moving work, and the necessity of utilizing proper warehouse forms for the efficient transacting of business, was the most significant topic generally discussed at the second annual meeting and dinner of the Pennsylvania Furniture Warehousemen's and Van Owners' Association, held Feb. 11, at the Hotel Adelphia, Philadelphia.

The business session, which was held during the afternoon, had the largest attendance of all previous meetings, there being some forty members and guests present, many of whom were from the various Eastern states. The meeting was thrown open by an address from A. P. Hill, the reports of the various committees following. In these reports the members were not only interested, but were pleased with the valuable work accomplished by the chairman and members of the committees, for the betterment of the association. These reports brought to light the excellent work being done toward the placing of the warehouse business on a more standard basis whereby the warehousemen and van owner will have a better conception of how to use his facilities to their fullest extent. The reports show ten new members had been added to the association in the past year, giving it a total of thirty-three active and one associate member. In addition to this it was stated by the chairman of the membership committee that now that the association has

grown to be of real assistance to its members, a campaign would be started within the very near future to go after associated members.

Following the reports, many topics of vital interest to all were presented and elicited opinions of decided value. One of the principal topics brought up and generally discussed was that of the necessity of utilizing the proper kind of warehouse forms for the transaction of business on an efficient basis. In this, one of the members exhibited various warehouse forms.

The return loads proposition has been in the minds of the Pennsylvania warehousemen for some time. To date the only household goods or van owners' return loads bureau in operation is that of the van owners of Greater New York. This bureau was established in May, 1918, and has been of exceptional value to the van owner and warehouseman in that city in securing of back-loads. The Pennsylvania warehousemen took this subject up and discussed it from various angles, the outcome of which was a unanimous vote to establish a return loads bureau in connection with the secretary's office. The bureau is to be given a tryout for about six months; only the actual expense, such as telephone, stationery, etc., to be born by contributions received from the members.

In addition to these subjects, papers were presented by Buell G. Miller on "Human Element in Business"; "Some of the Indirect Results of Advertising," by W. A. Sweet-

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*The second annual meeting and dinner of the Pennsylvania Furniture Warehousemen's and Van Owners' Association held at Hotel Adelphia, Philadelphia, Feb. 11*

## Texas Warehousemen Meet at Dallas

### Expect Warehouse Receipts Act To Be Put Through

THE advisability of having the uniform warehouse receipts act put through in the State of Texas and the necessity of charging an adequate rate which will compensate for overhead expenses as well as drayage in the distribution of pool cars was the principal topics presented at the semi-annual meeting of the Texas Warehouse and Transfer Men's Association held at the Adolphus Hotel, Dallas, Texas, Jan. 18.

The meeting, which was attended by fifteen members, representing practically every large city in Texas, was thrown open by an address from President S. J. Westheimer, the reports of the committees following.

The first topic presented was that regarding the uniform warehouse receipts act. In this, Heber Page, Dallas Transfer Co., Dallas, chairman of the legislature committee went into detail and told of the work he and the committee had been doing for the past six months. In this he stated that W. K. Ford of the Interstate Forwarding Co., Dallas; S. J. Westheimer and himself held a conference on February 4, with Senator Weinert on the advisability of having this act put into effect in the State of Texas. The outcome of the conference was the committee had convinced Senator Weinert that such a law should be passed and it is therefore expected that the act will go through at the next session of the legislature.

In the discussion on general conditions of business, both drayage and storage, cost of labor, overhead and road conditions it was the opinion of those present that an *in* and *out* labor charge should be made on all household goods storage. The jest of the latter discussion was that some of the members at present are making this change while others were not. It was, however, shown that it is a service which is rendered for which the warehouseman in many instances does not receive compensation to cover. It was therefore suggested that a charge equal to one month's storage charge be made to cover this expense, and that this charge be made at the time the charge is made for the first month's storage.

The subject of liability was discussed to some length in which it was found that many warehouses have in their contract a clause limiting their liability to \$25 for the contents of any piece or package, unless special attention is called to the value, and if

a higher valuation is placed on the goods, the customer states in writing the valuation and a higher storage charge is therefore made.

On the subject of moving, it brought out that 90 per cent of this work was done on the hourly basis, prices running from \$2.50 per hour for horse-drawn vans and two men, \$4 per hour for two, three and five-ton trucks and three men.

The questions of distribution charges of pool cars was next taken up, and it was ascertained that some companies only charge for the drayage on pool cars which they handle. It was shown that some of the companies who have traffic departments were charging from 2½ cents to 3 cents per cwt. as a distribution charge. Three cents per 100 weight it was said, would cover labor, unloading, checking and making out distribution sheets as well as collection of money advanced to consignee on shipments. In addition to this, the regular drayage rate should be made to cover that work. This is an important matter and the quicker the transfer and storage companies realized that their customers are willing to pay for this service and that they are paying it in most sections of the country, a better service will be rendered and the customer will be better satisfied.

Before the business meeting was adjourned the convention went on record as favoring, and expecting its members to assist the Goods Roads Committee in their county to their fullest extent within their power.

The subject next presented was where the next annual meeting will be held. In this, a motion was to hold it at San Antonio on August 20, 1919. This was seconded and unanimously carried.

After the morning meeting the entire convention was given a most delightful dinner by the Dallas warehousemen.

## Boston Team Owners Purchasing Trucks

During the past two years there has been an enormous increase in motor truck transportation throughout the New England States, and especially in and about the city of Boston, Mass. It has been estimated that the team owners of that city have purchased in the neighborhood of 900 trucks of various capacity during this time, these being used for both local and interurban hauling. It was recently stated by many of the largest team owners in Boston that the city was slowly but surely turning from horses to motor trucks.

## Asks \$60,000,000 To Rent Warehouses

### Goethals Says Government Losing Heavily—No Storage Space

MAJOR-GENERAL GOETHALS, Chief of the Purchase, Storage and Traffic Division of the War Department, has asked the House Military Affairs Committee for an appropriation of \$60,000,000 to be used in storing the enormous quantities of surplus war supplies of the department. He said \$30,000,000 would be needed for the rental of storage houses and an additional \$30,000,000 for maintenance.

Thousands of tons of supplies are being brought back to this country from France, General Goethals told the committee, and the ports of debarkation are becoming congested because no warehouses are available. He said that much of the material was being left out in the open and that the Government was losing heavily by its deterioration.

## Bond Issue for Warehouses

A number of Nashville's representative business men appeared before the Board of City Commissioners recently to urge the passage of an ordinance for the issuance of \$300,000 worth of bonds for river terminals and warehouses. During the conference it was stated that this would be in line with the work being undertaken by the Government regarding terminals and warehouses.

## Used Distillery for Storage

The Monticello Distillery, one of the largest plants in or around Baltimore, Md., is to be converted into a storage warehouse. This was determined at a recent meeting of the directors, at which time plans were drawn for converting the present large group of buildings into warehouses. It is also the intention of those in charge to add new facilities to such an extent that the plant will constitute the largest enterprise of its kind in that city.

## Increase Warehouse Wages

The wages of more than 1500 members of the Warehouse and Cereal Workers' Union, San Francisco, have been increased 50 cents per day, the daily rate now being \$4.50. The agreement was reached at the Labor Temple, S. M. Haslett, representing the warehousemen's Association, put forward the motion to grant the demands of the workers.



## To Present Lien Bill Before Legislature

Indiana Association Behind Act  
—Covers Wide Range

THE Indiana Transfer and Warehousemen's Association is to present a bill to the General Assembly at the next legislature session for an act to give transfermen, drayage and all other persons, firms or corporations engaged in the packing for shipment or storage or transferring, hauling or conveying goods, merchandise, machines, machinery or other articles of value from place to place or for money paid for freight, storage or demurrage charges on any goods, merchandise, machinery, or articles of value, or for erecting machines, machinery, stacks or other equipment—a lien upon such property and providing for the enforcement thereof. Following is a copy of the bill which will be presented to the General Assembly of the State of Indiana:

Section 1.—That transfer men, draymen, and all other persons, firms or corporations engaged in packing for shipment or storage, or transferring, hauling or conveying goods, merchandise, machines, machinery or other articles of value from place to place, or for money paid for freight, storage or demurrage charges on any goods, merchandise, machines, machinery or other articles of value, or for erecting machines, machinery, stacks, or other equipment, shall have a lien upon any such goods, merchandise, machines, machinery or other articles of value, packed, hauled, transferred, conveyed, or erected for charges for such packing, hauling, transferring, conveying, or erecting the same, or for money paid for freight, storage, or demurrage, on such goods, merchandise, machines, machinery, or other articles of value.

Section 2.—Any transfer men, draymen, and all other persons, firms or corporations engaged in packing for shipment or storage, or transferring, hauling or conveying goods, merchandise, machines, machinery or other articles of value from place to place, or for money paid for freight, storage, or demurrage charges or for erecting machines, machinery, stacks or other equipment, wishing to acquire such a lien upon any of this property, whether the claim can be due or not, shall file in the recorder's office of the county, at any time within sixty (60) days after performing such labor or payment of money, described in Section one (1) of this act, notice of his intention to hold a lien upon such property for the amount of his claim, setting forth the amount claimed, and a substantial description of the property. Any description of the property in a notice of the lien will be sufficient, if from such description or any reference therein the property can be identified.

Section 3.—The recorder shall record the notice, when presented, in the mis-

cellaneous record book, for which he shall receive twenty-five (\$.25); and all liens so created shall relate to the time the labor was begun or money advanced, and shall have priority over all liens suffered or created thereafter.

Section 4.—Any person having such a lien may enforce the same by filing his complaint in the circuit or superior court of the county in which the lien is filed at any time within one year from the time when said notice has been received for record by the recorder of the county, and if said lien shall not be enforced within the time prescribed by this section the same shall be null and void. If said lien be foreclosed as herein provided the court rendering judgment shall order the sale to be made, and the officers making the sale shall sell the property without relief whatever from valuation or appraisal law.

Section 5.—In all suits brought for the enforcement of any lien under the provisions of this act, if the plaintiff or lienholder shall recover judgment in any sum, he shall also be entitled to recover reasonable attorney fees, which shall be entered by the court trying the same, as a part of the judgment in said suit.

Section 6.—This act shall not be construed as repealing any other law now in force concerning liens or the foreclosure of the same, but this act is intended to be supplemental to all laws now in force concerning liens and the foreclosure of the same.

## Transfer and Storage Men of Montana Conclave

A resolution to encourage the practice of making a separate charge for hauling, labor in and out and storage, and to discourage the practice of making a flat rate storage and transfer on consignments, were the principal topics discussed at the second annual meeting of the Transfer and Storage Men's Association of Montana, held at the Placer Hotel, Helena, Mont., Feb. 3.

In addition to the above subjects, the members discussed various other topics which were of vital interest to the industry in general. Interesting talks pertaining to the transfer and storage business were made by W. E. Baker, Billings; J. M. Nugent, Miles City; H. G. O'Rourke, Helena; W. E. Martin, Glendive; Bruce Cook, Billings; Fred Cristy, Butte; Edwin Grafton, Billings; Fred J. McQueeney, Butte.

Following the discussion on the various topics and the papers presented, the chairman announced the election of officers, those being elected were J. M. Nugent, president; E. M. Baker, vice-president; F. J. McQueeney, secretary and treasurer. Before the meeting adjourned the members decided to hold the next annual meeting at Billings, Mont.

## Bankers Are Planning to Construct Warehouses

New Yorkers Backing Scheme for  
World Warehousing System

HUGE merchandise warehouses, so constructed as to be proof against fire or revolutionary mobs, will be erected at a series of ports strategically situated for trade in various parts of the world, if the present plans of prominent New York banking interests carry. It is understood that definite steps will be taken in promotion of this enterprise at a meeting to be held during the latter part of February or early in March.

Several Government officials have said the plan of the New York bankers is evidence of the part America will play in foreign trade. The war has taught both the shipper and trader that those ports which have sufficient water to permit steamers to dock will be the great trading centers. The day has passed when cheap and inefficient labor can lighter cargoes to shore, and modern machinery installed on wide docks has demonstrated that quick loading and unloading, quick runabout, means quick trips with resultant profits for every one concerned.

Recent reports have been made to the effect that the French Government plans to expend \$40,000,000 on the port of Havre. Genoa, Italy, is to spend \$4,000,000 on the construction of warehouses within the very near future. Shanghai already has plans for spending \$35,000,000 for docks and warehouses. Denmark plans to spend \$3,000,000 on the port of Rodly and \$1,500,000 on Rungsted, all of which goes to show other countries as well as America have come to the conclusion the need of adequate terminals and warehouses.

## Canadians to Meet

The second annual meeting of the Canadian Warehousemen's Association will be held in Vancouver, B. C., on March 7 and 8. While the first meeting of the association held at Saskatoon, Dec. 10 and 11, 1917, was considered successful, it is expected that this meeting will be attended by a much larger number, as the organization has greatly advanced during the past year. The program includes papers on the subject of accounting in relation to transfer and warehouse work, sale of goods, long-distance motor trucking, intercity shipments, co-operation, and various other subjects which are of equal importance to the industry.



## New Shipping Rates to All Parts of World

### Shipping Board Completes Tariff for American Steamers

COMPLETING its schedule of shipping rates on American Steamers from all parts of the world, the Shipping Board has issued another long list of tariffs supplementing those which were previously issued. Including in new list are rates from the Pacific Coast to points in the Far East, applicable on general cargoes, from North Atlantic ports to European ports and return, from South Atlantic ports to European ports and return; from North Atlantic ports to the East and Dutch East Indies and return; from Pacific Coast ports to Atlantic Coast ports on wooden coastwise ships; and from Gulf ports to Europe and return. Special rates are quoted on shipments of special commodities such as steel, cotton, etc.

A new rate for the shipment of nitrate from Chilean nitrate ports to North Atlantic ports also is quoted by the Board on such shipments. The new rates announced by the Board are as follows:

From Pacific Coast to Far East, all cargo.

Japan, China, \$12 per ton 2000 lb., \$14 per cubic foot; Manila, \$12 per ton 2000 lb., \$14 per 40 cu. ft.; Vladivostok, \$25 per ton 2000 lb., \$25 per 40 cu. ft.

These rates are not applicable on bookings made prior to announcement. Above rates apply on pieces and, or package weighing up to 4480 lb. weight each. For pieces and, or packages in excess of 4480 lb. each, customary heavy lift scale to be added.

All commodity rates for homeward cargo will be established and quoted upon application, it was said, in regard to homeward rates from above ports to Pacific Coast and other homeward rates.

From United States, North Atlantic ports to Rotterdam, Antwerp, Havre and Bordeaux, \$1.25 per 100 lb., or .65 per cubic foot, ship's option.

Marseilles, Cette, Genoa and Naples, \$1.60 per 100 lb., or 85c. per cubic foot, ship's option.

Barcelona, \$1.85 per 100 lb., or 95c. per cubic foot, ship's option.

Above rates apply to all bookings on shipping vessels sailing on all cargo except cotton.

As to rates based upon weight or measurement at ship's option, these will be applied in principle according to the commodity list contained in tariff No. 8.

On homeward quotations above rates apply on pieces and, or packages weighing up to 4480 lb. weight each. For pieces and, or packages in excess of 4480 lb. each, customary heavy lift scale to be added.

Rates of freight from United States South Atlantic ports to Europe.

Rates on all cargo are applicable except those mentioned below:

	Per 100 Pounds	Per Cubic Foot
United Kingdom (see note)	\$1.07½	\$0.54
Holland (Rotterdam) ....	1.33	0.70
Belgium (Antwerp) .....	1.33	0.70
France (Havre, Bordeaux)	1.33	0.70
France (Marseilles, Cette)	1.68	0.90
Spain (Barcelona) .....	1.93	1.00
Italy (Genoa, Naples)....	1.68	0.90
United Kingdom, \$20 per ton of 2240 lb.		

Havre-Bordeaux, \$28 per ton of 2240 lb.

Barcelona, \$40 per ton of 2240 lb.

Note—As to rates based upon weight or measurements, at ship's option, these will be applied in principle according to the commodity list in tariff No. 8.

Rates of freight from United States North Atlantic ports to:

Japan, Kobe, Yokohama, close weight cargo \$2, all other cargo \$25.

China, Hong Kong, Shanghai, close weight cargo \$20, all other cargo \$25.

Philippine Islands, Manila, close weight cargo \$20, all other cargo \$25.

Russia, Vladivostok, all cargo \$40.

Straits Settlement, Singapore, close weight cargo \$20, all other cargo \$25.

French Indo-China, Saigon, close weight cargo \$20, all other cargo \$25.

Dutch East Indies (rates to Dutch East Indies apply on steamers sailing after Feb. 20, 1919); all cargo, \$40.

Above rates apply on pieces and for packages weighing up to 4480 lb. weight each. For pieces and for packages in excess of 4480 lb. each customary heavy lift scale to be added.

Rates of freight from Pacific Coast ports to Atlantic Coast ports. The rates quoted in tariff No. 14 are on wooden steamers only moving from Pacific to Atlantic ports.

Rates of freight, United States Gulf ports to Europe:

Rates are on all cargo except as mentioned below.

	Per 100 Pounds	Per Cubic Foot
United Kingdom (see note)	\$1.15	\$0.58
Holland (Rotterdam) .....	1.40	0.73
Belgium (Antwerp) .....	1.40	0.73
France (Havre & Bordeaux)	1.40	0.73
France (Marseilles & Cette)	1.75	0.93
Spain (Barcelona) .....	2.00	1.08
Italy (Genoa and Naples) ..	1.75	0.93

Exceptions:

United Kingdom ports—Starch, spelter, sulphur, lead billets and canned goods, \$1 per 100 lb. Tobacco, \$1 per 100 lb.

Steel—United Kingdom ports, \$20 per ton of 2240 lb.; Havre and Bordeaux, \$28 per ton of 2240 lb.; Antwerp and Rotterdam, \$30 per ton of 2240 lb.; Barcelona, \$40 per ton of 2240 lb.

Above rates per 100 lb., or per cubic foot at ship's option, on return cargoes.

Rates of freight on nitrate from Chilean nitrate ports to United States North Atlantic ports, per ton of 2240 lb., \$17.50.

Loading and discharging at rate of 800 tons per day, Sundays and holidays only excepted, on demurrage at rate of \$1 per net registered ton per day.

## Gain in Movement of Export Freight

### Deliveries to Steamers Are Now Exceeding Car Receipts

CONSIDERABLE improvement in the movement of overseas traffic during the past month over the previous month is shown in a report from the Exports Control Committee made public by Walker D. Hines, Director-General of Railroads. During the second week of the month there was 9180 cars of freight received at North Atlantic ports, and 10,131 cars delivered to boats; the total number of cars on hand at North Atlantic ports on Feb. 11 was 32,343, as compared to 33,201 the week before, a decrease of 958 cars.

Commercial export freight is now moving freely to New York, the steamship lines displaying a desire to get cargo as fast as possible, it has been reported. Export freight at North Atlantic ports (exclusive of the United States Government freight, bulk, grain and coal) totaled received 7144 cars and 7357 freight cars delivered, a decrease of 951 cars.

Arrivals of carload exports, freight exclusive of bulk grain and coal, during the month of January totaled 41,342, while deliveries were 41,108. During the week of Feb. 10, 2,000,000 bu. of grain was shipped to New York, 500,000 bu. of wheat from West Fairport to Baltimore, and 500,000 bu. of rye from Buffalo to Philadelphia. It has been reported that prospects at present look very favorable for substantial clearance of grain from the seaboard elevators within the next few days.

A statement recently made by the Department of Commerce on Feb. 24, was the month of January was hardly short of remarkable in view of the cessation of shipment of military supplies. During this month the total exports amounted to \$623,000,000, which was not only a high record for any month in the country's history, but was \$10,000,000 higher than any previous high record.

## Opposition to Warehouse Bill

Operators of warehouses in various parts of the State of Washington have signified their intention of fighting Senate Bill No. 59, which provides that every person who conducts a warehouse shall furnish the county assessor annually a report of all property held together with the owners' names. The warehouse companies are protesting that it would almost be impossible to list property of this kind, which is often packed so the contents are not readily known.

## To Study New Freight Handling Methods

### Manufacturers of Handling Devices Organize Association

**F**OLLOWING the suggestion of the Department of Commerce and the United States Shipping Board, there has been completed in New York an organization of an association of manufacturers of machinery for handling materials. The suggestion was made by the two Government agencies because of the need of intensive study of the freight handling methods at both the railroad and ocean terminals, and by mobilizing the experience and ability of all manufacturers of handling devices in a single organization, the Government will not only be able to reach this industry in an efficient way when it needs co-operation, but the industry itself can more effectively attack the large and difficult problems presented at the terminals and ports.

The following companies have come together in the work of forming the organization and are now constituting themselves a membership committee to complete the charter membership of the association:

Watson Elevator Co., Edw. F. Terry Mfg. Co., International Conveyor Corp., Rowson, Drew & Clydesdale, Inc., New Jersey Foundry & Machine Co., Hayward Co., Elwell-Parker Electric Co., Sprague Electric Works, Otis Elevator Co., Manning, Maxwell & Moore, Inc., Robins Conveying Belt Co., Michener Stowage Co., New York City; Shepard Electric Crane & Hoist Co., Montour Falls, N. Y.; Brown Portable Conveying Machinery Co., Chicago, Ill.; Karry-Lode Industrial Truck Co., Long Island City, N. Y.; Whiting Foundry Equipment Co., Harvey, Ill.; Wellman-Seaver-Morgan Co., Cleveland, Ohio; Alliance Machine Co., Alliance, Ohio; Alfred Box & Co., Inc., Philadelphia, Pa.; Meade-Morrison Mfg. Co., East Boston, Mass.; Alvey-Ferguson Co., Cincinnati, Ohio; Heyl & Patterson, Inc., Pittsburgh, Pa.; American Hoist & Derrick Co., St. Paul, Minn.; Cleveland Crane & Engineering Co., Wickliffe, Ohio; Clyde Iron Works, Duluth, Minn.; Ohio Locomotive Crane Co., Bucyrus, Ohio; Northern Engineering Co., Detroit, Mich.; Electric Controller & Mfg. Co., Cleveland, Ohio.

### N. Y. Harbor Development

Members of the New York-New Jersey Port and Harbor Development Commission, of which William R. Willcox is chairman, held a meeting Feb. 14 and listened to a plan formulated by Gustav Lindenthal, consulting engineer, for the development of the terminal and transportation facilities of the port of New York.

Mr. Lindenthal's plan recommends that the two states be linked with bridge, tunnels and railroads. It also calls for extensive improvement along the Manhattan, New Jersey, Long Island, in fact, all waterfront in that vicinity, and in addition a great freight classification yard on the New Jersey meadows and a belt line all around the harbor. He estimates the cost of the project would be in the neighborhood of \$211,000,000, which would not include water-front improvements.

### Ask Higher Rates

The motor car dealers and the Los Angeles Grain Exchange are interested to a considerable extent in the proposed new warehouse tariffs for that State as indicated at the recent hearing of the application for the increases before Railroad Commissioner H. W. Brundig. The warehouse companies making application for the new tariff are the American, the Los Angeles, the Pacific Commercial, the Santa Fe, Shattuck & Nimmo and the Sunset Terminal. Clyde Ellwood of the Sunset Terminal Company testified that the proposed new tariff was practically the same as that now in effect in San Francisco and that the average increase in rates over those now charged was 20 to 25 per cent. This increase, he said, was made necessary by reason of the increased labor charge and also because of the higher cost of material.

### Ohio Warehousemen Form Association

The Ohio Warehousemen's Association, a new organization recently formed, was the outcome of a meeting held in Columbus at which seventy-five prominent warehousemen of the State of Ohio gathered to consider several vital matters of State-wide importance to the warehouse industry. After these matters were taken up and discussed, it was decided to form an Ohio Warehousemen's Association. Those elected to office were: W. E. Hague, president; Edward Wuichet, treasurer, the secretary to be elected by the president.

The members which were elected directors are: W. E. Hague, Columbia Terminal Warehouse Co., Columbus; W. L. Smith, Smith Fireproof Storage, Cincinnati; Charles S. Turner, Moreton Truck & Storage Co., Toledo; Edward Wuichet, Union Storage Co., Dayton; A. H. Greeley, General Cartage & Storage Co., Cleveland; N. J. Cummins, Cummins Storage Co., Canton; W. L. Cotter, Cotter Transfer & Storage Co., Mansfield.

## Warehousemen Create Information Bureau

### To Enable New Yorkers to Adopt Standard Basis of Rate Making

**A**N information bureau has been established in New York for the purpose of following out the general plans for the standardization of basis of rate making, and for the procurement of such information as is necessary to enable the warehouseman to meet the demand of the Federal Food Administration and the general public and for a better and more scientific rate structure. The following are the members of the bureau:

Javis Stores, Inc., F. C. Linde Co., Bush Terminal, American Dock Co., Terminal Warehouse Co., Beard's Erie Basin Stores, Tower Stores, Vandal Warehouse Co., Baker & Williams, Fidelity Warehouse Co., Mercantile Warehouse Co., New York Dock Co., Merchants Refrigerating Co., of New York, and the Campbell Stores, of Hoboken, N. J.

The officers of the bureau are: W. E. Halm, New York Dock Co., president; W. C. Crosby, Fidelity Warehouse Co., vice-president; W. F. Oatman, Mercantile Warehouse Co., secretary, and F. E. Phraner, Baker & Williams, treasurer. The executive committee consists of the officers mentioned above and R. C. Simonds, G. H. Clarke and F. A. Horne.

The office of the bureau is located at 24 Stone Street under the management of H. J. Jacobson. Membership to the bureau is open to all reputable firms engaged in the warehousing business in or about the port of New York.

### Plans Better Port Facilities

Five and a half million dollars are available for use in connection with expansion of port facilities of Portland, Ore. At a conference held Feb. 5, G. B. Hegardt, secretary of the Portland Commission of Public Docks, said that the port was badly in need of adequate dock and terminal facilities. At the meeting it was made known that plans have already been drawn up for a 12,000-ton floating drydock and an additional pier 1500 ft. long and 250 ft. wide.

### Concrete Tanks for Fuel

The Committee on Inflammable Liquids of the National Fire Protection Association recently recommended the proper construction of concrete tanks for the storage of fuel oil. In addition to this, the committee has drawn up a set of tentative regulations for the consideration of its members.



### Callahan Declares

# Merchandise Storage Rates Should Not Puzzle Household Goods Men

BY F. V. CLARK

THERE had never been a regular merchandise warehouse in the City of Calverton where the warehouses of Barker and Callahan had divided with friendly rivalry the offerings of household goods which came regularly throughout the year in a volume dependent upon the season.

Callahan had formerly been an employee of the elder Barker and since his attainment of his position as an independent rival had remained the friend and preceptor of Caleb Barker, Jr., who was studying the business and who was fast growing into the management of affairs at the Barker warehouses.

The merchandise which had come into the town had been received by either Barker or Callahan or the Calverton Transfer Co., and in most cases delivered to the merchant's store or to his own warehouse.

Market conditions had recently brought about a change in the local buyers' policy and merchandise in increasing quantities was being offered to the two household goods warehouses.

It was his perplexity over this problem that brought Caleb Barker, Jr., to the office of Callahan, and it was the reflection of this puzzle in the face of Caleb that brought Callahan's exclamation: "Say, what's the matter? You look like torn burlaps on a mahogany sideboard."

"Well I certainly need the consolation of the sideboard's contents to cheer me up this time," said Caleb. "How many salmon make a bedstead? How many apricots make a chair? Here is Smith, Jacobson & Co. insisting on me taking in a carload of California canned goods and want me to quote price on them when the only basis of estimating I know is the number of van-loads that will go in a five-dollar room."

"George Washington started life as a surveyor and ended up as President," said Callahan. "Sure," replied Caleb. "The black hen laid a white egg, but what under the sun has that got to do with it?"

"Start with a survey of the goods offered, of course. The thing that you are selling is your floor space; you can pile the goods up until the weight of the pile equals the sustaining strength of the floor, and you can't tell

### Charge for Space Occupied

ALL clean commodities in self-contained packages are suited to storage in household goods warehouses, and the figuring of charges is merely a matter of determining the space occupied and the handling services required.

As usual in computing storage rates, Callahan proves to be a strict follower of Sis Hopkins's famous maxim, "Don't Never Do Nothing for Nobody for Nothing," and the equally famous motto used by our much beloved Pittsburgh friend—"Don't forget to get the money."

how high you can pile them until you have one case measured and weighed and then, of course, you can easily figure the price you have to charge per package to get the square foot rate you want."

"If that was all I wouldn't be here," said Caleb, "but listen a moment; there are seven brands of goods; some are packed four dozen cans to a box, some are two dozen to a box, and you have to pile them so that you can deliver whichever kind is called for."

"Well," said Callahan, "that's what you call assortment for accessibility. I've had trouble of that kind in the H. H. G. business. There was an old gentleman once who stored some trunks with me who was a crank about the weight of underwear he wore. If the thermometer rose or fell ten degrees he rushed home to change to a heavier or lighter weight, and if there was a twenty degree change he was bound to come to the warehouse to get at a trunk. Whenever I saw the storm signals flying or read of a hot wave approaching I knew his cab wasn't far away.

"No, Caleb, don't let them slip that stuff to you without knowing just what it is; how many of each variety and how fast the several varieties will be drawn on. In assortment you must make an allowance of 33 1/3 per cent for aisle space and another allowance for 'honeycombing,' or the irregular heights of piles caused by partial deliveries of certain brands." "Well, after I get all this data," asked Caleb, "how much do I charge? They tell me they won't stand for anything like household goods charges."

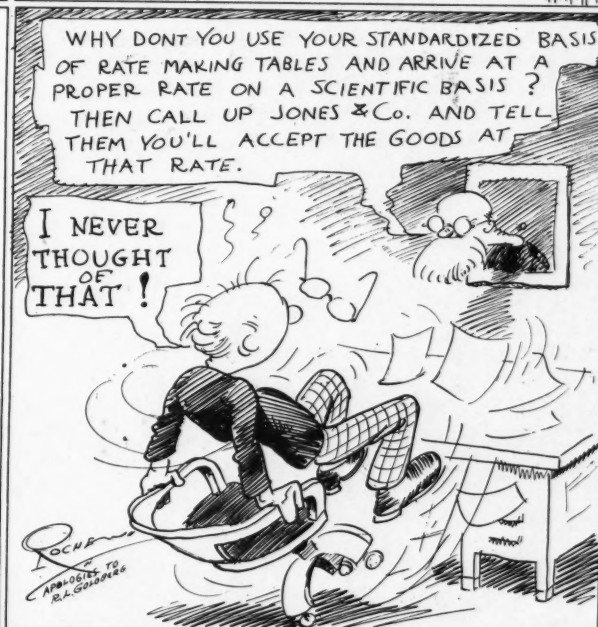
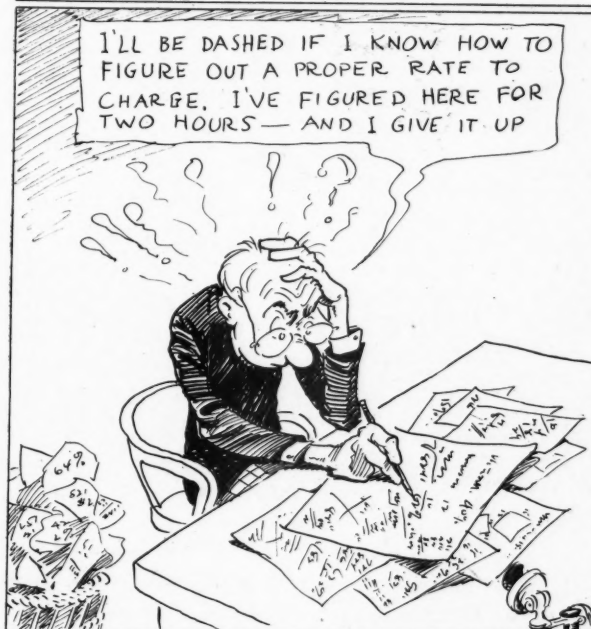
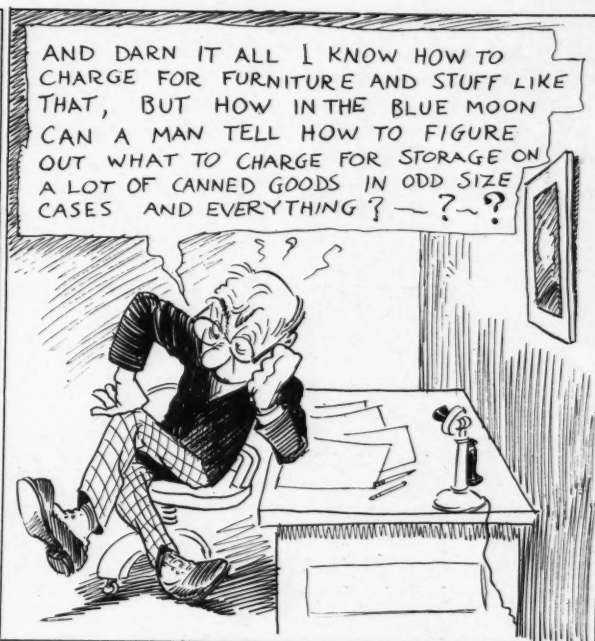
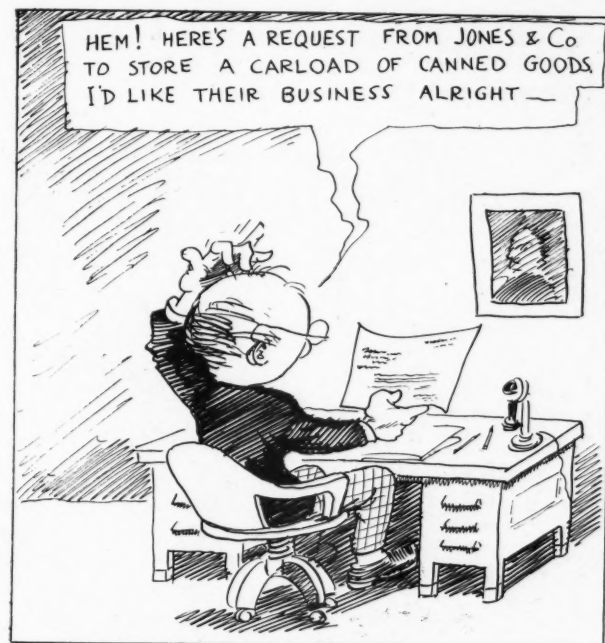
### Who Operates Your Business?

"If you are going to let them tell you what to charge," said Callahan, "why worry at all? But I thought you were making the Barker rates, so you ought to make them so that they will pay you for your trouble, hey?"

"They say that in Fulton City," said Caleb, "the rate is 2 11/17 cents per case and that I have to meet it."

"Fulton City prices are as various as the colors in a Christmas cravat," said Callahan. "I was over there around New Year's asking all the questions I could without getting kicked out and I learned some lurid facts. I went into Jim Mason's and found he had accepted a lot of whiskey at 30 cents a barrel with 30 cents in and out





*The computing of rates for merchandise in a merchandise or a household goods warehouse is not such a complicated proposition after all, if they are worked out on a scientific basis*

charge, and then I slipped in to see Levatsky, who has just taken over the old Tiger brewery property and made a warehouse out of it, and found him closing a deal for the same class of goods at \$1.50 a barrel with \$1.50 charges in and out. I found new automobiles stored for ten bucks a month and others at \$20 a month on which \$10 bonus had been charged for securing the space.

"You know what Kipling said, 'If you can keep your head when all around you are losing theirs'? Well, Caleb, you are in this business to stay, sentenced for life, as it were, and there are two things necessary to keep in business. Charge enough to make money and don't charge

'holdup' prices no matter what the conditions are, and then when the smoke of battle is over you will have two things needful, first an unimpaired bank account due to resisting the temptation to cut rates, and, second, the unimpaired confidence of your customers due to resisting the temptation to 'sting' them.

"Folks used to think science consisted of making sparks jump from a battery or knowing the distance to Mars and Jupiter, but you can take it into partnership to-day without any danger of being conspicuously 'highbrowed,' and a truly scientific warehouse rate will make us sure winners every time we have a 'full house.'"

# Philadelphia Warehouseman Tells How to Arrive at Rates for Moving

## TWO METHODS

*First, Combined Estimate Cost and Profit—Second, Result of Investigation  
Added to Overhead Cost and Desired Profit*

By BUEL G. MILLER

Sec. and Treas., Miller North Broad Storage Co.,  
Philadelphia, Pa.



*One of a fleet of 5-ton Pierce-Arrow trucks operated by the Miller North Broad Storage Co., Philadelphia, Pa.*

**T**HERE seem to be two methods of establishing rates for service, first: A presumed or estimated cost, combined with an estimated profit. Second: The results from the investigation of carefully compiled records of past experience added to an over-head cost and a desired profit.

The first plan is generally followed by the transfer and storage men who are willing to accept the price of a competitor as a basis for their charge, in many cases assuming that they can underbid and still make a profit.

Those following the second plan will seldom go wrong, and in most cases not only derive a profit for themselves, but have a wholesome influence upon others engaged in the same line of business, and there is no doubt that they aid in the stabilizing of the same.

### Few Agree Regarding Truck Costs

During the period of our experience with motor trucks, we have met many owners and users of motor trucks and motor cars. Each individual seems to have his or her own idea as to best method of determining the cost of operating their vehicles. It may appear strange, but it is nevertheless true, that outside of our own organization, I have not been able to find three individuals who would agree upon the same plan for arriving at truck costs.

There is one point upon which all users can agree, irrespective of whether the user or owner is striving to produce a profit from the operation of a motor truck, or a more efficient means of transportation, viz.: he is striving to secure the result at the least possible cost. In cases where service is being sold in an effort to produce a profit, it is most important the owner know his costs.

### Record Clerk Needed by Truck Owner

Where service, and that only, is the important factor, costs are not nearly so vital.

In either case, the progressive business man is disposed to investigate the cost of operating this department of his enterprise, and naturally is desirous of knowing the best and fairest method of arriving at the cost.

Many suggestions have been made, and elaborate formulas prepared in an effort to determine actual costs, more especially among the users of trucks. Many of these systems are splendid, and no doubt, where large fleets of motor propelled vehicles are being operated, the owner should install a regular record clerk to keep track of the expenses of each truck. Inspection of these records will warn the owner of increasing costs, etc., and justify any tariff that he may have established or its increase.

There is one factor which has influenced the cost of operating trucks, more particularly during the period of the world wide war, i. e., the contingent and unexpected cost due largely to accidents and the consequential loss, of use of labor, truck earnings, etc.

The operator of the truck, of necessity being a human being, possesses a part, at least, of the many weaknesses of mankind, and the owner is susceptible to the mistakes, not alone of his own drivers, but the drivers of other trucks. We have found the average chauffeur during the period of the war more irresponsible and careless than prior to the war.

In order to provide for these contingent losses or costs, we should not presume that we are immune to the law of average which at sometime will surely include us among its victims. We should therefore make provision for the inevitable when it arrives.

Prior to the period of the war, we compiled a cost from past experience covering such items as wages, insurance, garaging and interest, which items we figured on a daily basis. Such items as tires, oil, gasoline, repairs and even depreciation we figured on the per mile basis. Depreciation is perhaps the most speculative of these latter items, and unless a truck owner has had considerable experience with the make of truck used, its life will have to be estimated as at so many miles.

#### Determining Truck Cost Per Day

Should an owner be desirous of determining the per day cost for operating a truck, he can, by arriving at the daily cost for such charges as wages, insurance, garage and interest added to the per mile cost for such items as tires, oil, gasoline, depreciation and repairs, multiplied by the number of miles covered for the day, added to allowance for contingencies, be able to arrive at the actual cost for the operation of a given unit for a day.

Anyone operating motor trucks for profit should not overlook his overhead expenses such as office rent, clerk hire, advertising, telephone, postage, etc., but should make provisions for such charges by adding to his cost an amount or percentage to take care of this expense.

Most large businesses depend upon volume to reduce the percentage of overhead, which makes it possible for them to give a better service or a lower figure than the small business, and derive the same percentage of profit.

The sum total of the above amounts added to the desired profit, gives the selling price for the service.

#### How to Establish Tariff

Many concerns have established a tariff by the hour with a maximum mileage of about fifty miles per day. In most instances these tariffs have been ample to meet their costs and provide them with a desired profit.

There never has appeared to the writer much opportunity for loss in the operation of motor trucks on an hourly basis, with a conservative maximum mileage per day, where a fair price per hour has been established, and especially where the truck is operated around the city, or in long distance hauling where the road conditions are of the very best.

Our chief concern has been for a proper rate for long distance hauls, more particularly where the mileage has been great per day, and the truck run over varied kinds of roads. We know that the same earning rate per day on these long trips will very materially reduce the margin of profit, and in many cases cause a loss.

During the last year, we found it necessary to increase our schedule for long distance hauls. At one time wages were advanced per truck about four dollars per day, to say nothing of insurance, tires, etc., and we found a simple plan for increasing our rate of income five dollars per day.

#### Estimating Long Distance Rates

We estimated that a truck on long distance hauls can make one hundred miles in one day, or a round trip of fifty miles in a day, assuming that our previous schedule was correct, we raised our schedule ten cents per mile, which in the case of the fifty mile haul gave us an even five dollars per day increase, and on the one hundred mile trip, which took two days, gave us a ten dollar increase for the trip, or a five dollar per day increase. Should the trip be a seventy-five mile run, it would in all probability take one and one-half days, and give us seven dollars and fifty cents, or a rate of increase of five dollars per day. By the same method, an increase of two dollars and fifty cents per day would call for an increase of rate of five cents per mile.

We are frank to admit that some of our hauls are not fairly charged for, because we have not given the

**THE** estimators of the Miller North Philadelphia Storage Co. carry a handbook which gives the rates for moving goods to any principal city or town within a radius of 400 miles of Philadelphia.

The leaf shown on the left gives the mileage from Philadelphia to the town designated, opposite which is a key number. After the key number is obtained, the estimator refers to his rate sheet, shown below, and looks for the corresponding number. This tells him the rate for that particular job

Mileage	Key No.
11.8 Abington, Pa.	8
104. Abbotstown, Pa.	40
69.8 Aberdeen, Md.	34
19.1 Abrams, Pa.	11
53.1 Absecon, N.J.	22
35.2 Acton, N.J.	18
252. Albany, N.Y.	78
7.6 Aldan, Pa.	7
Allenhurst, N.J.	34
41.7 Allentown, N.J.	19
54.1 Allentown, Pa.	24
34.2 Alloway, N.J.	18
16.7 Ambler, Pa.	9
189.7 Amenia, N.Y.	63
48.9 Amityville, Pa.	21
83.6 Anolomink, Pa.	39
25.4 Ancora, N.J.	15
97.4 Andover, N.J.	39
16.8 Andalusia, Pa.	9
Anglesea, N.J.	39

Key No.	1-ton	2-ton	3-ton	5-ton
1.	5.00	7.50	10.00	13.00
2.	6.00	10.00	12.00	16.00
3.	7.50	12.00	15.00	20.00
4.	10.00	15.00	18.00	22.50
5.	12.50	17.50	20.00	25.00
6.	15.00	17.50	22.50	27.50
7.	15.00	20.00	25.00	30.00
8.	17.50	22.50	27.50	35.00
9.	20.00	22.50	30.00	37.50
10.	22.50	25.00	32.50	40.00
11.	25.00	27.50	35.00	45.00
12.	27.50	32.50	37.50	50.00
13.	30.00	35.00	40.00	52.50
14.	32.50	37.50	45.00	55.00
15.	35.00	40.00	47.50	57.70



most careful consideration to conditions of the roads which does influence the cost of operating the truck; but in a great many instances, this has been taken into consideration, and our schedule of prices has been prepared accordingly.

We have arranged a price list for our four sized units on the per load basis, which is arranged in alphabetical order, showing the miles distant from Philadelphia, and has a key number, so that instead of having a price for each individual place, we have this key, the individual place is referred to the key number for the price.

The compiling of this rate sheet for moving is based upon a minimum daily revenue for each sized truck, and where long distance is taken into consideration. In addition to a minimum daily income, we have taken into consideration the number of miles covered. In other words, presuming that a given trip takes five hours, or one-half day, and assuming that \$65 per day is the revenue desired, the charge for the half day trip would be \$32.50. On long distance hauls of 100 miles or more, we would base our calculations at a rate of so much per mile. For instance, assuming that \$1.35 per mile was desired, we would charge \$135 for a 100-mile trip.

#### Adopts Standard Rate Schedule

A copy of schedule of prices giving key numbers from one to fifteen is shown herewith. Schedule No. 1 calls for \$5 for our smallest unit, \$7.50 for the second sized unit, \$10 for third and \$13 for the fourth sized unit. This is per load, and the lowest price.

By referring to the copy of inventory of towns and villages, it will be found, for example: Abbington is eleven and eight-tenths miles from Philadelphia. The key to this is No. 8, while Ambler, Pa., which is sixteen and seven-tenths miles, calls for key No. 9. Ancora, N. J., twenty-five and four-tenths miles takes key No. 15. Ancora takes a higher price in proportion because of the necessity of crossing the river which consumes time and costs ferriage.

**Editor's Note.**—B. G. Miller, secretary and treasurer of the Miller North Broad Storage Company, Philadelphia, Pa., whose article on motor truck operation in the storage business appears herewith, had occasion during 1918 to carefully estimate the actual cost of operation of a five-ton truck from his fleet of thirteen work trucks. While his figures do not include overhead expense, or contingent cost and though there is some difference between the price of gasoline and lubrication then and now, the estimate is valuable in showing the method of a successful truck operator in arriving at the cost.

#### Operates Thirteen Trucks

In addition to his five-ton trucks, of which he has ten, all Pierce-Arrows, Mr. Miller operates one two-ton Pierce-Arrow and two two-ton Autocars. There are also two Fords for the estimators and a Hupmobile and a one and three-quarter-ton Dodge for office purposes.

The Miller North Broad Storage Company big covered vans painted in yellow with attractive lettering make an impressive line-up. The territory ordinarily covered touches as far south as Washington, Hagerstown, Md., and points across the border of West Vir-

ginia; north as far as Boston; east to Atlantic City and Wildwood and west beyond Harrisburg. Wilkes-Barre and Gettysburg are stopping points in the regular line of business.

Mr. Miller differs from some operators who divide the cost of the chauffeur between the number of miles run during a given period and charge this item of expense on a per-mile basis. Following is his estimate:

#### FIGURES FOR APPROXIMATE COST IN OPERATING A FIVE-TON TRUCK

Cost of truck.....	\$5,500	
Equity end 3d year.....	2,000	
Depreciation .....	\$3,500	\$3,200
Repairs to chassis during 3 years.....	1,500	2,000
Miles run during 3 years, 50,000 or cost		
per mile, 10c or.....	5,000	5,200

These figures do not include increased cost of equipment and repairs at increased cost, which is about 20 per cent or two cents (2c) per mile.

Gasoline at an average of 27c per gallon, 4 miles to a gallon.....	7c.
If average can be 4½ miles to a gallon.....	6c.

Present cost of tires:	
2—36 x 5 at \$76.80.....	\$153.60
4—40 x 6 at 114.50.....	458.00

\$611.60

Average 10,000 miles per set or 6c per mile.

Oil 200 miles to a gallon at 65c per gallon.  
Average cost 1/3c per mile.

Repairs to body and incidentals during a period of three (3) years.....	\$500.00
On a basis of 50,000 miles.....	1c per mile.

#### SUMMARY COST PER MILE

Depreciation and repairs to chassis 10 & 2....	0.12
Gasoline .....	.06
Tires .....	.06
Oil .....	.001⅓
Repairs to body.....	.01
Total .....	.25⅓

Daily cost either divided as per mile cost or as a daily charge.

Insurance, taxes, garage rent.

Wages, of course, are a daily charge. Meals and lodging justly belong to each trip.

#### Amounts charged against truck No. 27:

1st year, depreciation.....	\$1,450.00	
Repairs .....	200.00	\$1,650.00
2d year, depreciation.....	\$1,200.00	
Repairs .....	600.00	\$1,800.00
3d year, depreciation.....	500.00	
Repairs .....	1,200.00	1,700.00

# Public Wants Modern Business Methods



*The first fireproof household goods warehouse constructed in the City of Hartford, Conn.*

NO matter what rate is charged, it is the progressive business man with modern equipment and with a modern fireproof warehouse incorporating the newest of ideas that usually receives not only the bulk, but the better class of the transfer and storage business in his city. This is demonstrated by the rapidity with which a Hartford, Conn., van owner increased his moving business over 100 per cent soon after placing the first motor van in this service in his city; and in less than a year after he constructed a modern household goods fireproof warehouse—the only one in that city—the plant was filled to capacity and the company was refusing storage, while other warehousemen in the same city had plenty of vacant space and were doing their utmost to get additional business.

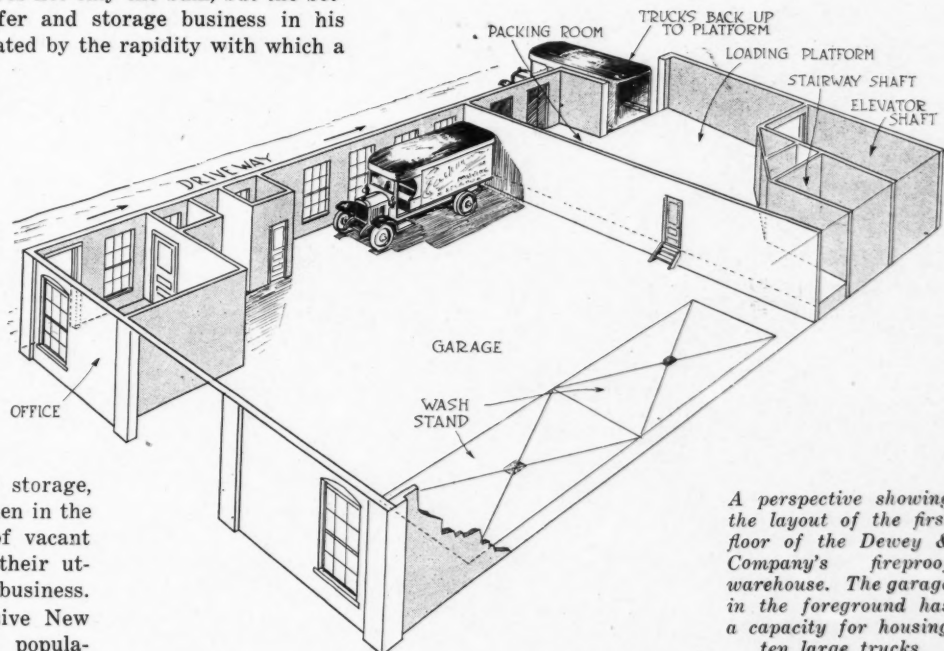
Hartford, a progressive New England city, with a popula-

## *Warehouseman Increases Activities 100 Per Cent by Using Trucks. Constructs First Fireproof Plant in Hartford*

tion of 100,000, until 1913, had all its household goods removals done by horse-drawn vehicles, even though other cities of similar size utilized motor trucks many years before. In fact, as far as is known, it was in 1905 that the first truck was placed in the service of moving household goods in this country. This same condition existed in Hartford in respect to modern household goods fireproof warehouses. Of the six household goods plants in that city, not one was of fireproof construction until 1914, when a new modern warehouse was built.

### **Fireproof Warehouse Is Success**

After this plant was constructed, it was the opinion of many transfer and storage men throughout the New England States that it would be some time before the new warehouse could be operated on a paying basis. One thing that some of these men based the idea upon was that all of the six non-fireproof warehouses had been established anywhere from 21 years to 88 years, and that these warehousemen were not only well known throughout that section, but each had his own customers. In this they were wrong. The new fireproof warehouse was a success from the day it opened its doors, its room being filled soon after, even though its rates were somewhat higher than those of other companies in the city.



*A perspective showing the layout of the first floor of the Dewey & Company's fireproof warehouse. The garage in the foreground has a capacity for housing ten large trucks*

The van owner who first conceived the idea of utilizing motor trucks for horses in Hartford was Joseph Pelchat. Mr. Pelchat started in the moving business in 1911 with no capital outside of his four horses. After being in the moving business for two years, he saw that there was an excellent future for him to increase his activities if he could give a better service than that given by the other van owners in that city. In studying this situation he came to the conclusion that the public not only wanted efficient service, but it always desired a clean and good appearing van when having its household effects moved. He also saw that the activities of all van owners in the city was limited because they were unable to handle any business outside the city limits, a condition which was caused by utilizing horses.

With this condition before him, he saw that it was obvious that he must have other equipment if he wished to please the public and was to take any class of moving, whether it was local or long distance. It was in 1913 that he purchased his first motor truck, a 3-ton Dalton, the first used in the moving business in Hartford. From the moment the truck was purchased, the van owners' business increased, both locally and inter-city. After this first truck was purchased, other motors were substituted for horse-drawn equipment as the business increased.

#### Customers Desire Fireproof Warehouses

The next thing this van owner did was to enter partnership with George E. Dewey, another progressive man who also had a good conception of the transfer and storage business, the firm then became known as George E. Dewey & Co. During the same year the truck was purchased, a one-story fireproof garage was constructed with a foundation of sufficient strength for a six-story building. This was done so that the company could construct additional floors and enter the household-goods storage business whenever it desired.

While it was the idea of the heads of the company to enter the storage business as soon as possible, they did



One of the Dewey company's 3-ton Packard trucks, equipped with a body 18 x 7 x 6 ft. 6 in. During the past year the company's trucks have hauled goods to practically every city along the Atlantic coast and as far as 600 miles to the west, making the round trip 1200 miles

not do so until they had made a thorough investigation of the public needs in that city and vicinity. During this investigation they found there was a need of a fireproof warehouse, and that when many customers placed their goods in storage, one of the first questions would be, "Is the building fireproof?"

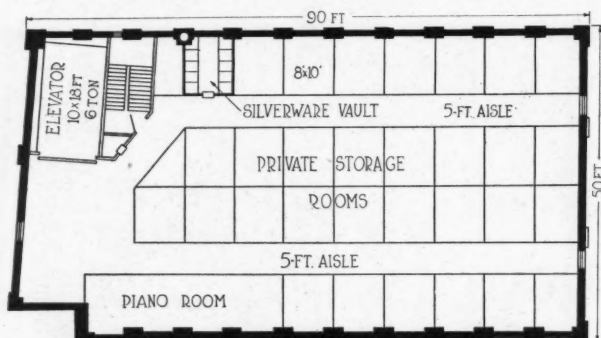
After securing this information, work was begun on the new plant, which was completed during the latter part of 1915. It was only a short time after the warehouse was finished that this branch of the activity was operated on a paying basis, and in less than one year every one of the 132 private rooms was rented, and have been occupied for the greater portion of the time ever since.

#### Moves Twenty Pianos Daily

While the company paid particular attention to the increasing of its storage business, it did not forget that its moving end of the business also needed attention. In this end of the business, new trucks and other equipment was purchased which was especially adaptable for the handling of pianos. At first this activity was confined to the moving of pianos for the general public and other van owners, but, having the best equipment in the city for this work, the company was later able to secure contracts from the eight piano stores in Hartford, an activity which required the services of two 1½-ton Federals, the number of instruments handled for the piano stores alone averaging between eighteen and twenty a day. The pianos handled for the stores were hauled on a contract basis, whereas the rates for those moved for the general public or other van owners are as follows:

For uprights with no hoisting, within a radius of one mile from the center of the city \$4, for one hoist \$7, and \$8 for two hoists; outside of this section the rate is governed according to the distance.

The rate for household removals in the city is \$4 per hour, which include the services of two men and a driver. One of the features of the Dewey company's business is it will send its equipment any place that it is possible to operate a truck. Its trucks have hauled goods to practically every city along the Atlantic coast and as far west



The above drawing shows the actual layout of the second floor of the Dewey warehouse. The two floors above are the same except that private rooms have been constructed in the place of the piano room and silverware vault



as 600 miles (one way). The company bases its rate at \$1 per mile for long distance work. The equipment used for inter-city moving is three 3-ton Packard trucks, each being equipped with a closed van body 18 x 7 x 6 ft. 6 in.

### Specially Constructed Boxes for Silverware

The fireproof warehouse constructed by the Dewey company is four stories, 50 x 90 ft., and cost \$45,000. It is a reinforced concrete structure with a brick facing. The ceilings have a height of 11 ft. 5 in., and the floors a carrying capacity of 200 lb. per square foot. The first floor is allotted to the office, the packing room, loading platform and a garage 50 ft. square. The second, third and fourth floors have been divided into private storage rooms, the partitions of which are constructed of metal rib lath and plaster. The entrance to each of the rooms are protected with Boston tin fire doors. These rooms

range between 8 x 10 ft. and 8 x 12 ft. in size, and are rented from \$5 to \$10 per month. For the storage of pianos a specially constructed heated room on the second floor has been allotted.

One of the features of the warehouse is its method of storing silver. For this class of storage a large room also on the second floor has been equipped with two metal racks, one on each side of the room. In each of these racks are twenty steel boxes, each being 30 x 30 x 36 in. inside, the same size as an ordinary trunk. These boxes are rented to a customer for \$1.25 per month. The customer packs his silverware in his own trunk or case, and then has it placed in one of these boxes. He is given a key to this box, and has access to it any time he desires. These silver boxes have also proven to be very profitable for the warehouse, as most of them have been rented since the plant was first opened.

## How to Minimize Re-conditioning Expenses

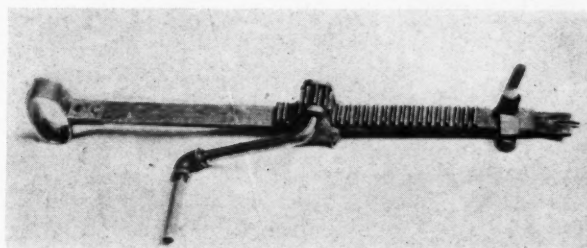
**COOPERING** or re-conditioning is an expense which every merchandise warehouseman is put to, due to the carelessness on the part of the shipper, "impact," damage received in transit or accidental breakage for which there is little means of prevention, especially when the crate or box is constructed in a very flimsy manner or without any particular strapping.

Many warehousemen have no means of repairing such crates or boxes other than a few nails or a few pieces of lumber, which would be very well if the warehouseman constructed a new case, but these boxes being made of flimsy material to begin with, it is therefore hardly possible to repair them by such a method so they will hold together until they reach their destination, especially if they are to be shipped by rail in less-than-car loads lots. During the past year merchandise valued at millions of dollars has been stolen, lost or damaged because of carelessness and the poor construction of containers.

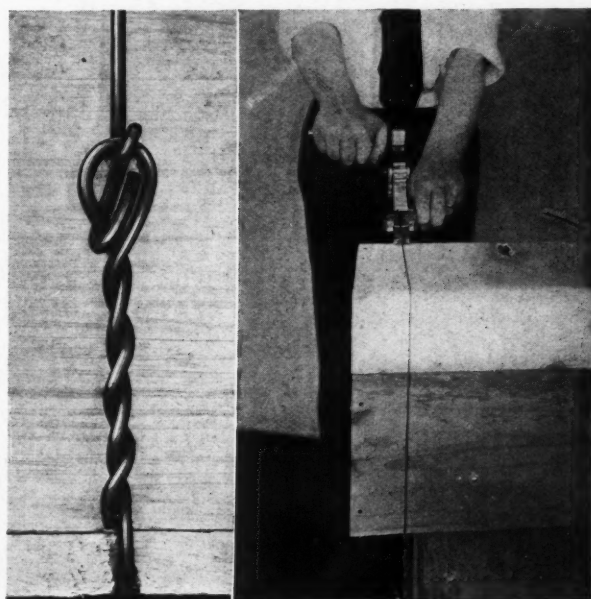
Even though the shipper uses flimsy containers, the amount involved in coopering or re-conditioning can be kept at a minimum through the use of proper facilities on which the initial cost and subsequent upkeep is low. To date few merchandise warehousemen have realized a profit on re-conditioning because the method used is such it involved a greater length of time than the customer could be charged for.

To simplify this method of re-conditioning wooden boxes or cases there are a few devices marketed which are especially adapted for this class of work. One of these is that of the Gerrard wire strapping machine, a device which will tie a box together so it will be almost impossible for it to come apart by carelessness or rough handling. This wire tying machine is a light weight tool, as shown in the accompanying illustration. The method of applying the strap is to place it around the box, passing one end of the wire or strap through the eye and applying the tools which grips the plain end of the strap and holds the eye in place to prevent slipping. The handle of the tool is then turned until the wire is drawn taut to the degree desired, a knot is then formed with the aid of a pair of pliers and the loose end cut off, leaving no projecting points to endanger the handler of the box.

For this machine there is no initial cost, as it is loaned by the manufacturer, labor and wire constituting the only expense. That is, it is only necessary to purchase the wire and the machine or tool is loaned.



*The Gerrard machine for strapping wire around boxes*



*At the left is shown the knot after it has been formed by the Gerrard machine; while at the right the device is drawing the wire taut*

# Greater Profits Realized

BY USING

## 'Trucks and Trailers in Place of Horses

After 25 Years in Business Bostonian Triples Tonnage  
Handled in 3 Years by Using Motor Equipment

**T**HE merchant of today is not only looking for service, but is willing to pay for it. This fact is brought out when the merchant who has been dealing with a team owner for a number of years will turn his work over to a more progressive team owner who is operating motor trucks wherever it is possible for him to do so. In addition to this, practically every team owner who has substituted motor trucks and trailers for horse-drawn vehicles has increased his business to such an extent he realizes larger profits than those previously received when operating horses exclusively.

As an illustration of this, one of the largest team owners in Boston worked his business up in 25 years' time so that he handled a daily average of approximately 500 tons of local freight, a work requiring 150 horses. Three years ago he began substituting motor trucks and trailers for horses, so he could increase his business by handling more tonnage and by covering a larger territory. To-day this team owner operates a fleet of fifteen 5-ton trucks and three 5-ton trailers, this equipment being purchased to handle the work of thirty horses. These trucks and trailers have not only handled the work of this number of horses, but have enabled the company to increase its activity so it now handles a daily average of approximately 1500 tons of freight within a radius of 30 miles during the busy seasons.

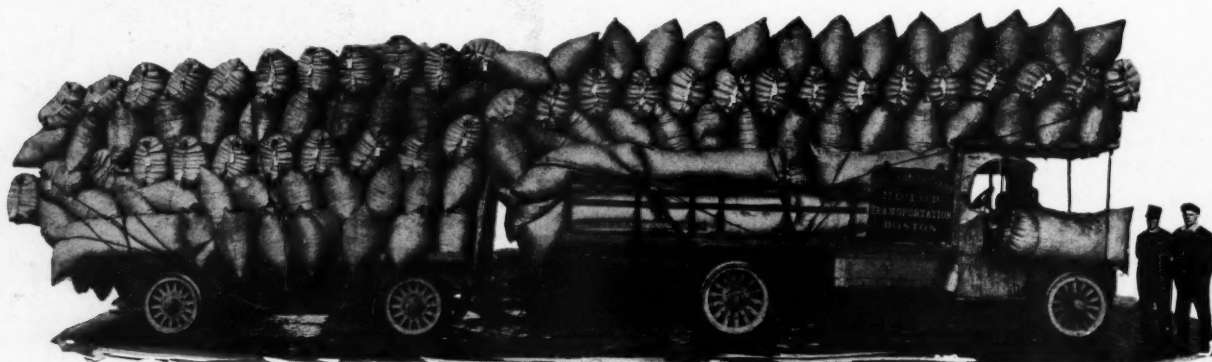
### Trucks Increase Team Owners' Activities

Heretofore the activities of the team owner was limited to the hauling of freight to and from the railroad terminals and piers and local merchants. Few had any conception of giving a more efficient service or hauling a distance over 5 or 10 miles. Besides the

merchant knew of no better service, therefore he was satisfied, but during the past few years this has changed, the merchant now looks to the man who can deliver his goods in the quickest time, not only within a radius of 5 or 10 miles, but distances up to 25 and 50 miles.

For instance, take the city of Boston, until recently practically all of the hauling was done by the horse. At first one or two team owners purchased motor trucks which were used to haul goods between the city and suburban points, and the service given proved to be so superior to that given by the horse many merchants desired their local hauling, as well as their interurban transportation, done by the motor truck. Realizing that a good profit was being made by those who had purchased trucks, other team owners later substituted motor equipment for their horses.

This of course gave the merchant a better service than he had heretofore received. He therefore looked to the man operating trucks to handle both his local and interurban hauling. The team owners who purchased trucks, or substituted them for horses, were the progressive ones, but there was not a sufficient number of trucks to satisfy the needs of the merchants who were interested in such transportation. Therefore many of the merchants purchased their own trucks, and as it was with numerous other companies, few of the merchants had any conception of the many details involved in the receiving and delivering of merchandise at the railroad terminals and piers. The fact was, it took the merchant a great deal longer and involved a greater expense than when the team owner handled the



One of the 5-ton Mack trucks and 5-ton Troy trailers operated by Youlden, Smith & Hopkins, Boston, Mass. The vehicles have just completed a trip between Lawrence and Boston, a distance of 26 miles, with an exceptionally large load of scoured wool consigned to the Government

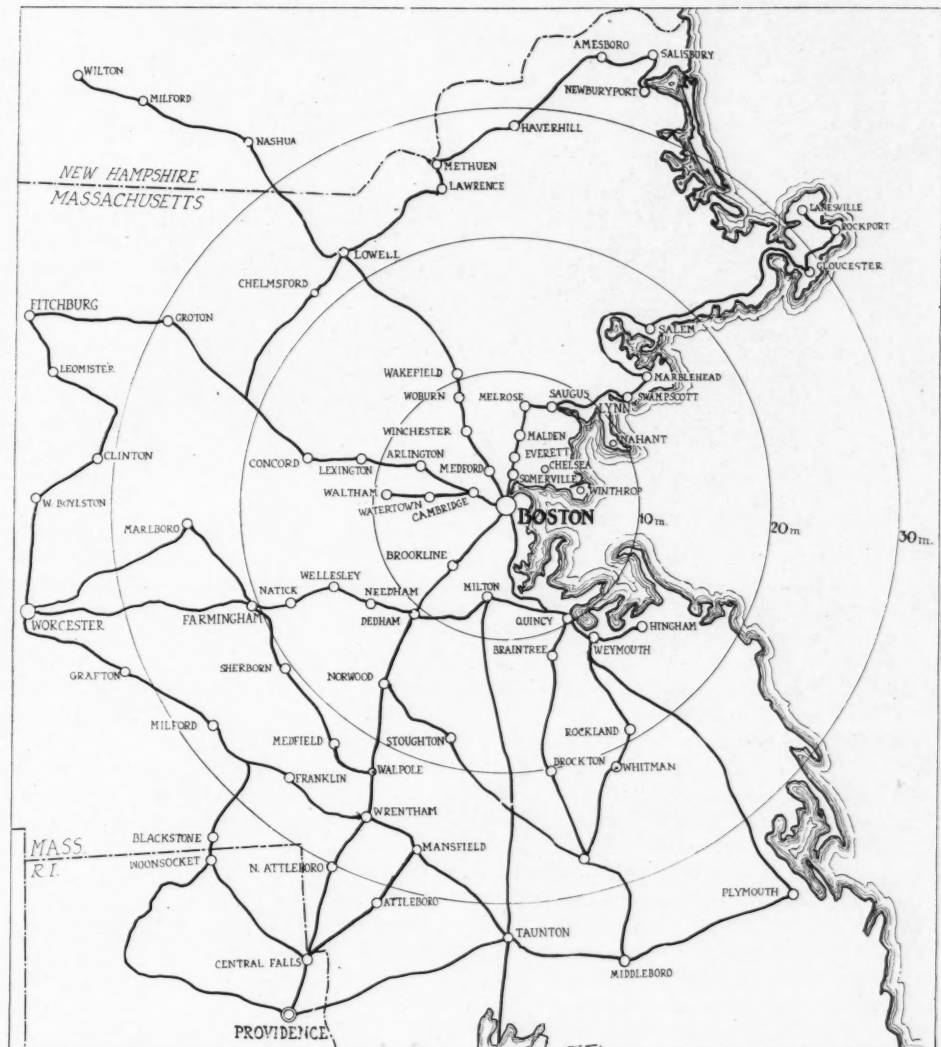
goods for him. In addition to this, few merchants had any conception of how to operate trucks on an economical basis, not having the services of an experienced man who understood the operating of such a department.

With these conditions before him, the merchant saw that he would have to create a new department, headed by one who understood the various details of the trucking business, if he was to make it a paying activity. A few of the Boston merchants were successful in this undertaking, whereas there was an equally large number who had purchased trucks, who did not wish to take on this activity in connection with their regular business, and who were pleased to sell their trucks and turn the work back to men who made a specialty of team and truck transportation.

Still, this condition did not change the attitude of the merchant in respect to having his hauling, as far as possible, done by the motor truck in preference to the horse. In fact, the merchants who sold their trucks looked to the progressive team owner operating trucks and trailers to handle their work. And the team owner who still operated horses exclusively was seldom the one whom the merchant turned his hauling over to, even though a particular one had handled that merchant's business for a number of years before he had experimented with his own trucking department, all of which goes to show that the team owner who does not utilize trucks and trailers wherever possible or wherever there is a profit to be realized by such a change will not be the one who will receive the bulk of the work or even the tonnage he previously received from some of his customers.

#### Service Retains Customers

As one illustration that this condition really exists, Youlden, Smith & Hopkins, one of the largest teaming companies in Boston, Mass., established its business with two horses and a capital of about \$500 in 1891. This company was headed by men who were progressive and who worked hard to secure the best customers in



Above is shown the principal routes within a radius of 30 miles of Boston that are now being covered by team owners of that city operating trucks and trailers. Before the team owners purchased motor equipment their activities were limited to local hauling within a radius of 5 and 10 miles of the city

the city. These customers were secured by personal solicitation and by advertising in the daily newspapers. After securing this class of business, the company was able to retain it by doing its utmost to please and to give the service desired, the outcome of which was the customer continued to deal with the company exclusively.

In addition to operating the business on such basis, the company always made it a point to see to it that its activities grew as rapidly as those of its customers. That is, as the business of the customer increased, the team owner purchased new equipment and saw to it that it always had adequate facilities to handle the additional business. In other words, the teamster grew with his customers.

The business of the Youlden, Smith & Hopkins Co. increased until in 1916 it handled approximately 500 tons of freight daily within a radius of 10 miles from the main office, an activity which required 150 horses and between forty-five and seventy-five drivers.





*A fireproof garage at Somerville operated by Youlden, Smith & Hopkins  
It has a capacity of fifty trucks*

It was about this time that the motor truck began to be recognized as an economic means of transportation. The company saw an enormous field for expansion if it was able to give its customers a quicker and better service, and if it was able to haul goods to the suburbs of Boston or within a radius of 30 miles. Not being able to do this with horses, the company at first purchased two 5-ton trucks, these being placed in the service of handling goods within a radius of 30 miles, leaving the shorter hauls for the horses.

Not only was a large amount of suburban business secured, but the local activities of the company were also increased to such an extent that new equipment had to be purchased. In doing this, every truck purchased replaced four horses, besides increasing both the local and interurban activities.

The trailers purchased were the first to be used in Boston, and although many of the officials of the various communities near Boston were against the use of such vehicles, the company up to the present time has been able to defeat any bill brought before the legislature prohibiting the use of trailers in these communities.

When one of the heads of the company was asked as

to the adaptability of the trailers in that section of the country, he said "he had found no difficulty in hauling goods to any place within the territory covered by his trucks. In fact, the roads being in fairly good condition, the trailer has reduced the operating expenses in the handling of this class of work materially."

The business of the company has increased in such proportion that it now handles approximately 1000 tons of freight daily during the busy season. While a part of this may be credited to the advertising in the daily newspapers, etc., it would have been impossible for the company to handle goods within a 30-mile radius with the horse. The company employed a system of laying aside a portion of its income each month which is used in advertising in the

newspapers, circularizing, etc. During the past year approximately \$5,000 was spent in this way by the Youlden, Smith & Hopkins Co.

The equipment now operated by this teaming company is fifteen trucks, three trailers and 120 horses, the latter being used exclusively for local work. All of the trucks, with the exception of two, are of 5-ton capacity, while the two smaller units are of the 2-ton type. The 5-tonners are Macks, Pierce-Arrows and Packards, while the 5-ton trailers are of the Troy manufacture. In addition to handling general merchandise, the company does the greater part of the heavy haulage work in that city and vicinity.

The company operates two large offices in the city, and one stable in South and another in East Boston. In addition to this, it has a large stable in Somerville, the total of the three stables having a capacity of 140 horses. It also operates its own fireproof garage, having a floor space of 24,000 sq. ft., with a capacity of fifty trucks. The rates charged by the company for suburban hauling are computed between those of the freight and express rates. Even though these rates are lower than those of the express companies, a regular express service is given at all times.



*A 5-ton Pierce-Arrow and Packard truck used for both local and long distance hauling by a Boston team owner*



## Letters from Readers

**T**HE purpose of this "Letters from Readers" Department of **TRANSFER & STORAGE** is to serve as an open forum in which questions of interest and importance in the transfer and storage business may be discussed by the readers of the paper. It is intended also to serve as a source of information to those who desire to know about any phase of the transfer and storage business. If there is any particular problem facing you, write to **TRANSFER & STORAGE** for the information you desire, and if this information is not in the office, the editors will do their utmost to obtain it for you.

### Trade Custom—Expiration of Storage at New York

Editor, **TRANSFER & STORAGE**: Will you kindly advise us if it is the duty of the seller or is it the trade custom to put a date of expiration of storage on delivery orders issued to a buyer? This question has been brought up by a buyer in the City of New York.—**SUBSCRIBER**.

**Reply:** There is an established trade custom in the City of New York, but this is only in the coffee trade. The custom is for the seller to place the date of expiration of storage upon the delivery order which is issued by him to the buyer. As far as we know there is no definite custom with respect to this matter in other trades, although in some cases the date of expiration is placed upon the order, while in others it is not. In the latter case the buyer must ascertain the date of expiration for himself by inquiry.

### Suggestions for Relief of Commercial Traffic Congestion

Editor, **TRANSFER & STORAGE**:—On the subject pertaining to the relief of commercial traffic congestion in the metropolitan district (New York), many able minds have presented their views upon this question, but the matter is of such interest and importance as to warrant the widest possible discussion.

Virtually all the plans hitherto presented have been based upon what was at one time the sound theory that all freight routes should terminate directly in Manhattan.

Present congested conditions render this policy undesirable, and modern engineering methods and motor transportation make it unnecessary.

Without going into all the complexities of New York's commercial traffic problem (which are well known to those that are interested), the writer submits the following suggestions:

First—The construction of ample vehicular tunnels under the Hudson River for the accommodation of commercial motor traffic.

Second—The abandonment of all downtown car-float freight stations of western trunk-line railroads, superseding them by depots at their natural terminals on the west side of the Hudson, convenient to the exits of the proposed vehicular tunnels.

Third—The direct loading and unloading on the west side of the Hudson of all transatlantic freight originating in or destined to the West.

Fourth—The extension of the New York connecting railway to connect Mott Haven with the transcontinental railroads and transatlantic shipping located on the west side of the Hudson, by a route through South Brooklyn and thence by a freight tunnel under the bay (thus also providing an uninterrupted all-rail freight route from New England to the South and West).

The outstanding features of this plan are that it does not involve any radical or revolutionary rearrangement of shipping either by rail or water, and if adopted would mean the withdrawal from Manhattan of a large volume of non-revenue producing traffic and also curtail to a great extent the car-float, lighterage and ferry systems, which at present constitute the most serious factor in harbor congestion.

The writer is of the opinion that some development along these lines is the only way to provide facilities for the tremendous volume of commerce which is destined to flow toward the metropolitan district during the next few years, and submits these suggestions with the hope that something may be accomplished at an early date in the solution of this difficult problem.—**FRANK McGRATH**,

Roseville Storage Co., Newark, N. J.

### Return Load Proposition Should Be Given More Attention

Editor **TRANSFER AND STORAGE**: The van owners of Syracuse are very much interested in the return load proposition and would like to call a few facts to the attention of owners of trucks and vans throughout the United States.

If a man has a load from Syracuse to Rochester and then brings a load back for two-thirds less than ought to be charged, he is doing himself and others harm. Whoever heard of a railroad decreasing the cost of freight because the car was loaded both ways? Do express companies reduce rates for carloads both ways? Not much. There are hundreds of men in the United States who have bought trucks and are trying to pay for them and this return load proposition ought to be given every attention.

I know one trucking concern that was in Detroit and was offered \$250 to bring a return load back. They



would not accept the offer, as it was about half the price, so somebody got \$400 for bringing that load to Syracuse. A person owning a large motor truck or van should think of the good of his business as well as what is best for the future. He should think that when he is taking a load back for a ridiculous figure he is cutting his own throat. They are not only taking money out of their own pockets, but out of other people's pockets also. There is no transportation company that gets enough for these country trips. Deducting holidays, Sundays and winter months, a motor is working only half the time. A dollar a mile looks rosy and it would be if one had work the year around.

Everything looks lovely when the trucks are new and nothing has been paid out for repairs. A return load should never be taken for less than ten per cent of the original price. I trust the owners of motor trucks in the United States will give thought to this subject, and the next time they are asked to bring loads back at a ridiculous figure, they will think of some others who are in the business and who are similarly situated with motor trucks on their hands, and are trying to make a living. Brother Truckmen, please give this your attention. We would like to hear from other moving concerns on this proposition. Ten per cent off on return loads is as low as anybody ought to go. Suppose that I only get one return load out of two trips at a good price. That one return load at a good price would give me as much money as I would get out of two or more at a small price. Somebody got a fair price on the other jobs.

Years ago, in Syracuse, there was a so-called public cart stand. That was a place where one hired a man, horse and a 3x9 ft. wagon for a small price. For years one owner always had the best horse, cleanest and brightest painted wagon, decent clothes. I asked him how it was and I got this valuable lesson—"See that man there just returning from a 25-cent job. Six months ago his rig was new, now look at it: horse rack of bones, harness tied up with wire, wagon all mud. The answer is: I do not go away from the stand unless I get at the lowest a 75-cent job and never do jobs worth 75 cents for 25 cents." I never forgot the lesson. A proprietor of a motor van had better do one job for \$1 a mile and loading and unloading labor price \$5 to \$10, than seven jobs for 75 cents a mile. W. E. HOOKWAY, Hookway Storage, Coal & Trucking, Syracuse, N. Y.

### Selling Household Goods at Auction

Editor, TRANSFER & STORAGE: We have had some goods in storage for quite some time, and, not having the signature and address of the customer, have been unable to collect the amount due on them. Can you tell me how long it is necessary to hold goods of this kind in storage? What is the proper procedure in selling such goods at auction? Is it necessary for me to employ the services of a lawyer in doing so?—T. J. CO., Illinois.

Reply: We have never heard of any warehouseman in the country who has ever accepted goods without having the customer sign a receipt or without securing the customer's name and address. In a case of this kind it leaves the warehouseman open for a liable suit if he sells

these goods, no matter whether he has done his utmost in trying to locate the customer.

In selling goods at auction it is not necessary to employ the aid of a lawyer. You can sell goods any time after the amount of storage due is such that your accrued charges are such that you think the amount is sufficient for you to do so.

The following is a portion of the warehouseman receipt act which refers to satisfaction to lien by sale:

A warehouseman should give a written notice to the person on whose account the goods are held, or to any other person known by the warehouseman to claim an interest in the goods. Such notice shall be given by person or delivered by registered letter addressed to the last known place of business or residence of the person to be notified. This notice should contain an itemized statement of the warehouseman claim, showing the sum due and the date or dates when it becomes due.

A brief description of the goods against which the lien exists should be given and a demand that the amount of claim as stated in the notice and such further claim as shall accrue, shall be paid on or before a date mentioned, not less than ten days from the delivery of the notice if it is personally, or from the time when the notice should reach its destination according to due course of post, if the notice is sent by mail, and a statement that unless the claim is paid within the time specified the goods will be advertised for sale and sold at auction at a specified time and place. In accordance with the terms of a notice so given, the law is as follows:

The sale of goods by auction may be had to satisfy any vivid claim of the warehouseman for which he has a lien on the goods. The sale shall be at any place where the lien was acquired, or if such a place is manifestly unsuitable for the purpose, at the nearest suitable place. After the time for the payment of the claim specified in the notice to the depositor has elapsed and advertisement of sale, describing the goods to be sold and stating the name of the owner or person on whose account the goods are held and the time and place of the sale, shall be published twice a week, two consecutive weeks, in a newspaper published in a place where such a sale is to be held. The sale shall not be held less than fifteen days from the time of the last publication.

From the proceeds of such a sale the warehouseman shall satisfy his lien, including a reasonable charge for notice, advertising of sale. The balance, if any, of such proceeds shall be held by the warehouseman and delivered on demand to the person to whom he would have been open to delivery or justified in delivering the goods.

If you follow the above instruction there will be no cause for a suit for goods sold at auction. But the goods you are holding and have no signature of the customer or do not know the customer's name or address should not be sold.

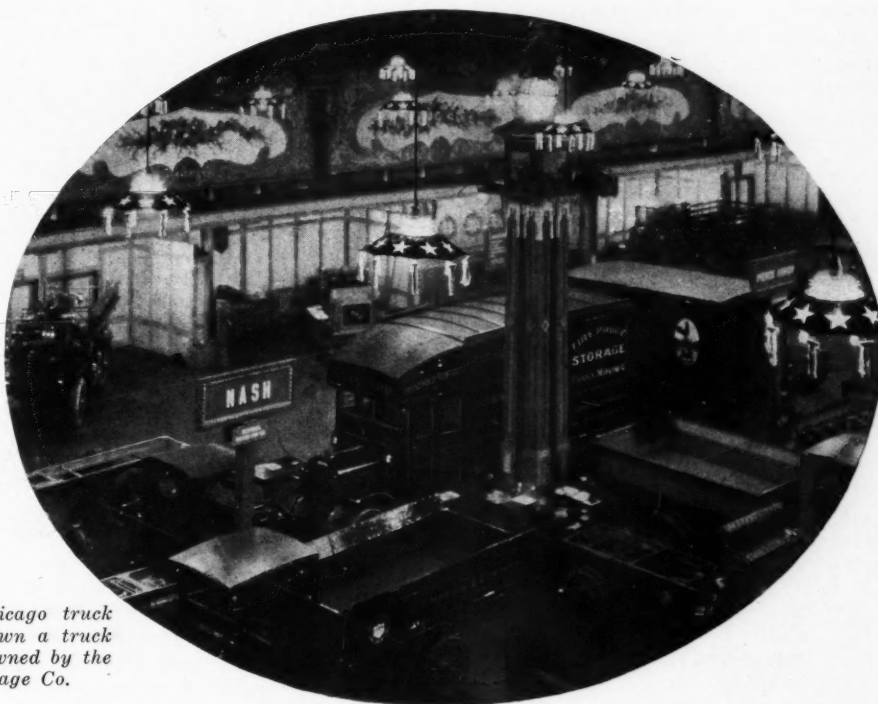
### Discuss Rural Express

A series of conferences with transfermen and motor truck operators have been held in various parts of California with the view of establishing motor express along systematic lines by L. A. Nares, Regional Director of the National Highway Transport Committee. During the conference it was stated that one of the first steps to be taken would be the establishing of return loads bureaus.



# Truck Shows Prove Educational for Transfer and Storage Men

*Various Kinds of Closed Cabs Shown at Chicago and New York Attract Much Attention—Bodies Adaptable to Transfer and Storage Man's Needs Exhibited—The Wares of Five Trailer Companies Are Shown at Chicago*



*A general view of the Chicago truck show. In the center is shown a truck equipped with a van body owned by the Standard Fireproof Storage Co.*

WITH the passing of the Chicago and New York truck shows, the transfer and storage man located in or within a few hours traveling distance should have a better conception of the various truck chassis, trailers, bodies, accessories, etc., adaptable to his particular needs. These men have somewhat of an advantage over those not thus located, in that, no matter how much they know about trucks, they can always get new ideas from these exhibits. In fact, these exhibits contained many things which meant greater efficiency in truck operation for practically every man in the industry.

The Chicago show held at the Coliseum, Feb. 3 to 6, under the auspices of the Chicago Automobile Trade Association, exhibited fifty-two makes, comprising 149 complete vehicles, while at the New York show, held at Madison Square Garden and the Sixty-ninth Regiment Armory, Feb. 10 to 16, there was exhibited fifty-eight makes, comprising 161 complete models.

## **Many New Trucks Exhibited**

Of the 149 models shown at Chicago, nine companies exhibited nine brand new trucks, while ten new companies exhibited their vehicles for the first time. Of the 161 vehicles shown at New York, four companies exhibited four models which have only been placed on the market within the past six months, many of which were especially adaptable to the needs of the transfer and storage industry.

The nine companies which exhibited new models at Chicago included the Acme Motor Truck Co., Cadillac, Masters Trucks, Inc., the Commerce Motor Car Co., Signal Motor Truck Co., Dorris Motor Car Co., Stewart Motor Truck Co., Available Truck Co., and the Fulton Motor Truck Co. The new companies exhibiting their wares at a show for the first time include the Mutual Truck Co., Paige-Detroit Motor Car Co., All-American Truck Co., Dearborn Truck Co., Hebb Motors Co., Tower Motor Truck Co., Transport Truck Co., Nelson Motor Truck Co., and the Panhard Motors. The four new trucks exhibited at the New York show were those of the Olds Motor Works, the Schwartz Motor Truck Co., W. W. Shaw Corp., and the West Motor Truck Co.

## **Greater Efficiency with Closed Cab**

Probably that which was next of importance to the industry was the number of bodies equipped with closed cabs that were exhibited. At both Chicago and New York it was apparent that there has been an increase in the demand for closed cabs for all classes of vehicles to protect the driver in cold, rainy and snowy weather. This shows that the transfer and storage man operating trucks has come to the conclusion that the income derived from the truck is governed by the efficiency of the driver, whether the truck is being operated on local or inter-city hauling.

The inclosed cab is not an expensive part of the truck compared with the benefits which accrue from its use.

During the past few years the wages of the motor truck driver have increased to such an extent it is now necessary for the transfer and storage man to realize the greatest efficiency out of each truck if he desires to make a profit on his investment. In this, the closed cab is a wise investment for the transfer and storage man, in that it keeps the driver in good physical and mental condition in cold or stormy weather, thereby enabling him to do more work with less effort than he would be able to do if he was cold and wet. Many of the inclosed cabs exhibited at both the Chicago and New York shows were included as standard equipment and sold with the truck. In addition to this, the convertible type and others which required some taking apart operation to change them from winter to summer use were also shown.

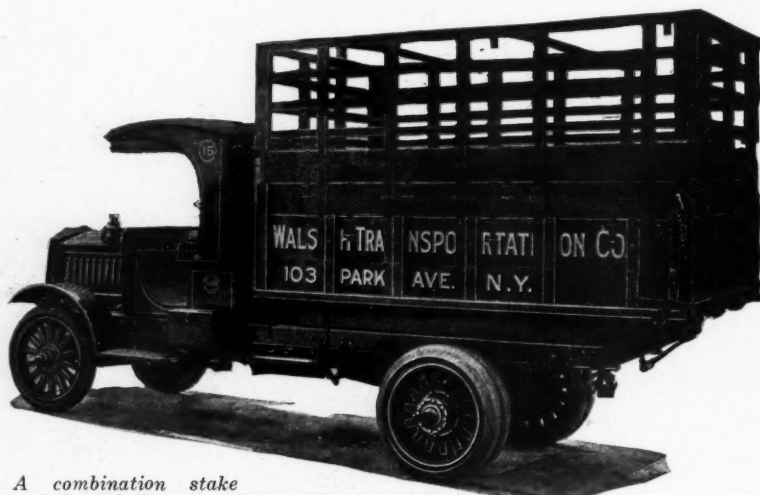
Many cabs were shown with substantial curtains for the protection of the drivers, while others were of the built up type with glass panels in wood sashes. In some instances these sashes are removed from the cab entirely during the summer, whereas others dropped into convenient pockets and are carried on the truck at all times. Still another new type is that of the roll-up door curtains which are carried on rollers suspended from the roof of the cab when not in use.

#### Many New Bodies Shown

That which was next of interest to the transfer and storage was the various types of bodies exhibited which were especially adapted to the field. At New York a large furniture van mounted on a 2½-ton Sterling truck was shown. This body had been purchased by Thomas



A van body 15 ft. in length, 6 ft. 4 in. wide and 6 ft. 6 in. in height mounted on a 2½-ton Sterling truck exhibited at the New York truck show



A combination stake and dump body mounted on a 4-ton Riker truck. The body is 10 ft. 6 in. in length, 5 ft. 4 in. at the front and 5 ft. 6 in. at the rear. When equipped with the racks it has a height of 6 ft.

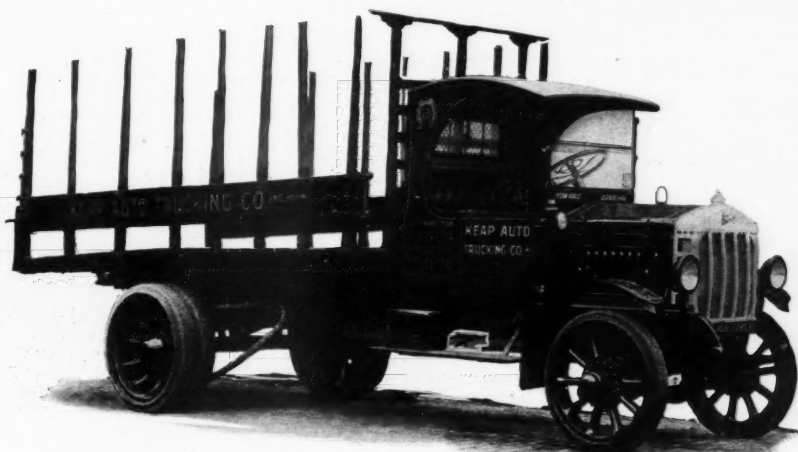
Reilly, a warehouseman located in New York. It is 15 ft. in length, 6 ft. 4 in. wide and 6 ft. 6 in. in height, and contains a cubical capacity of 650 ft. This body was of the highly polished panel type and was equipped with an inclosed cab for the protection of the driver. It was manufactured by Donegan & Nielson, Brooklyn, N. Y.

Many fine examples of body building were exhibited by the Fred Roeder Mfg. Corp., Brooklyn, N. Y. The feature of one of the bodies mounted on a 4-ton Riker truck, owned by the Walsh Transportation Co., New York, was the removable racks placed on top of an ordinary wood dump body to enable it to be converted into a closed rack type by the use of tarpaulin covers. The length of the body in back of the hoist is 10 ft. 6 in. The width of the front is 5 ft. 4 in., and the rear 5 ft. 6 in. The height of the stationary box is 22 in. The removal risers, each 9 in. high, are provided to be mounted one on top of another above the top of the permanent load size.

#### Convertible Dump and Stake Body

The racks are mounted on top of the risers with the side members extending down through U-shaped plates mounted one above the other on the two risers. The total height of the body with the racks in place is 6 ft. from the top of the floor to the top of the rack. Two additional rises of the same depth as those provided for the sides are also furnished for the front end of the body and the tailgate. The tailgate is mounted so that it can be hung from either the top or bottom. It is fitted with an automatic self-closing device with a special coil spring. Five of these bodies have been manufactured for mounting on as many trucks owned by the Walsh Transportation Co.

The convertible steel dumping type body mounted on a 6-ton Packard also attracted much of the attention of the transfermen. This body raised and lowered by means of a horizontal hydraulic hoist placed underneath the bottom of the body between the side frame member of the truck. Both the hoist and the body were furnished by the Horizontal Hydraulic Hoist Co.



*The stake body shown here is mounted on a 7-ton Sterling. It has a length of 14 ft. and a width of 7 ft. 3 in. And is equipped with an underslung hand winch located at the rear directly beneath the floor of the body*

The body is known as the all-purpose type and consists primarily of a level steel platform built on a heavy structural steel sub-frame. The platform has stake pockets on both sides and is provided with wide rectangular shaped metal posts at the front end of the body on each side and with similar triangular posts at the rear of each side. The front end of the body is closed by means of a steel plate extending for the full height of the front side posts.

#### Convertible Body Attracts Attention

When used as a stake platform body the stakes are merely dropped into their pockets. When it is used for carrying bulk goods the removable sides are put in place and held in position in the pockets at the side posts. Two sets of steel boards are furnished, the lower set being equipped with pressed steel stakes which fit into the stake pockets on the side of the platform. When only one set of stakes are used the body has a capacity of 108 cu. ft., whereas when the upper sideboards are used it has a capacity of 189 cu. ft. This body attracted attention because it was made entirely of steel and can be converted for carrying almost any kind of material.

Still another body that was looked upon with interest by the transfermen was the one exhibited by the Eriksen Auto Body Works, Brooklyn, N. Y. This one was mounted on a 7-ton Sterling truck and was especially adaptable for hauling heavy machinery, etc. It had a length of 14 ft. and a width of 7 ft. 3 in., and was equipped with an underslung hand winch located at the rear directly beneath the floor of the body.

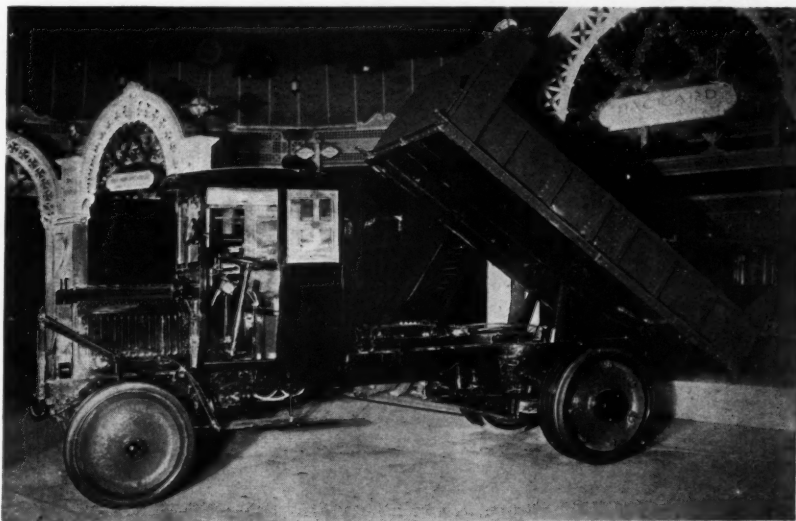
During the past year many transfer and storage men and other truck owners have purchased trailers and semi-trailers. This was shown by

the number of exhibits at Chicago. The manufacturers showing trailers and semi-trailers at the Coliseum include Lee Loader & Body Co., Troy Wagon Works Co., Lapeer Tractor-Truck Co., William G. Hesse & Son Mfg. Co., and the Highway Trailer Co., while at New York the Troy Wagon Works Co. and the Lapeer Tractor-Truck Co. showed their wares.

There was also much interest displayed in the matter of non-skid chains, in relation to the development of attachments enabling these to be secured to steel wheels of the disc type. Non-skids, differing from each other mainly in details and method of attachments, were shown. The manufacturers exhibiting such chains were the American Chain Co., the Challoner Co., the Rowe Calk & Chain Co., the National Chain Co., the Stanley Skid Chain, Toppling Bros. and the Maxim Munitions Corp.

#### Van Owners' Beefsteak Dinner

ONE of the most successful beefsteak dinners ever held by any association in the transfer and storage industry was that of the Van Owners of Greater New York, held at the Carlton House, New York, February 25. There were 247 members and guests present, many of which had come from other states to attend. During the dinner Charles Morris, president of the association, was presented with a chest containing 170 pieces of silver as an appreciation for the good work Mr. Morris has done for the association during the past year. Both the meeting and dinner were enjoyed by all present.



*Convertible steel dumping type body mounted on a 6-ton Packard. The body has a cubical capacity of 108 ft. when only one set of stakes are used and 189 cu. ft. when the upper side boards are used. The body is raised and lowered by means of a horizontal hydraulic hoist located beneath the bottom of the body and between the side frame members of the truck*



## News of the Transfer and Storage Industry

**American Warehousemen's Association** has elected the following companies to its membership: The Howell Warehouses, Ltd., Toronto, Canada; The Liberty Storage Warehouse Co., New York; the Interstate Forwarding Co., Dallas, Tex.; Jarvis Stores, Inc., New York, and the Syracuse Cold Storage Co., Syracuse, N. Y.

**Security Storage Co.**, Washington, D. C., at the annual meeting of its stockholders held Feb. 4, the following officers were elected: C. A. Aspinwall, president; C. W. Pimper, vice-president and treasurer, and Charles P. Havenburg, secretary.

The directors which were nominated were C. A. Aspinwall, W. S. Corby, W. F. Flather, C. J. Bell, Daniel Fraser and Albert Read. Albert M. Read, the retiring president, has been associated with the company since its incorporation in 1906. Mr. Aspinwall, the newly elected president, has served with the company in the capacity of chief clerk, assistant manager and vice-president. He is also the vice-president of the W. Fred Richardson Security Storage Co., Richmond, Va.

**Vandam Warehouse Co.**, New York, N. Y., has leased the seven-story building at Fifty-first Street and Broadway. The lease is for 21 years, at about \$65,000 per annum.

**Transfer and Storage Men's Association of Montana** have elected to membership the Bruce Cook Transfer and Storage Co., Billings, and the City Delivery and Transfer Co., of Helena.

**Lee Brothers Storage & Warehouse Co.**, New York, has leased the five-story warehouse at Tremont and Park Avenues, Bronx, N. Y., a plant previously occupied by Waite's Motor Van & Storage Co. This plant, which is 57 x 108 ft., gives the Lee company a total of 225,000 sq. ft. of floor space for the storage of household goods.

**Kreis Transfer Co.**, Indianapolis, Ind., has been incorporated with a capital of \$10,000, to carry on a general transfer business. The officers are Estelle Freis, Matilda Kreis and Harry Kreis.

**Columbia Transfer Co.**, St. Louis, Mo., has purchased a parcel of ground and will construct a service station 150 x 150 ft. The new plant will be of modern construction and

will provide 22,500 sq. ft. of floor space.

**John P. Melanson & Son**, Gloucester, Mass., well-known teamsters, has purchased the teaming business of William H. Collins, and will conduct it under the name of John P. Melanson & Son.

**McMahon Bros.**, Wilmington, Del., suffered a loss of its building by fire on Feb. 6. Practically all of the goods stored on the fourth and fifth floors was damaged.

**J. Roushall**, Reedley, Cal., who has been associated in the trucking business with Hugh Holcomb for a number of years, has disposed of his interests to George Fickle. Hereafter the firm will be known under the name of Holcomb & Fickle.

**Jones Transfer Co.**, Columbia, S. C., has changed its name and will hereafter be known as the Columbia Baggage & Transfer Co.

**W. T. Callaway**, Little Rock, Ark., owner of the City Transfer Co., has sold his business and equipment to Luke Ward and Charles East, who will continue to operate the business under the old name.

**Hollywood Fireproof Storage Co.**, Hollywood, Cal., is now under the management of F. G. Leonard, a well-known business man of Hollywood. Mr. Leonard was formerly sales manager of one of the largest paper companies in that section.

**Interurban Transfer Co.**, Riverside, Cal., has asked the State Railroad Commission for permission to operate a freight, baggage and express line between San Bernardino, Redlands, Santa Ana and other intermediate points. The heads of the company are to have a hearing some time during the latter part of this month.

**Long Island Express Co.**, New York, has been incorporated with a capital of \$100,000 to carry on a general express business in that city. During the recent New York motor truck show the company purchased two 2-ton and eight 5-ton Day-Elder trucks. These vehicles are to be used in the rural motor express service which will be operated between New York and the various sections of Long Island. The officers of the company are J. J. Warden, Pres.; B. B. Bermon, Vice-Pres., and E. M. Berow, Sec.

### Review of the Industry

(Continued from page 9)

houses. This condition shows a slight gain at the inland plants and a decline at the waterway, a condition caused by enormous overseas shipments. The household goods warehousemen of that city have had an especially good winter. There is a good demand for storage and practically every plant is filled to capacity. In fact, they have more goods than they desire for this time of the year. The labor conditions during February were better than any time for the past year, although some plants still find it hard to get men that are trained either for the merchandise or household goods business.

In Jersey City, Hoboken, Newark and other sections in New Jersey there has been a good demand for both merchandise and household goods space. About 70 per cent of the space in Newark is at present occupied, 80 per cent in Jersey City and between 65 and 85 per cent in other localities. Labor conditions are about the same in that section as in New York.

### Penn. Warehousemen to Establish Return Loads Bureau

(Continued from page 15)

ing, and "Why the Estimator Should be a Better Salesman," by George Alexander. A very interesting talk on the Maryland situation, regarding the licensing of trucks, was given by Charles Kaufman of the Kaufman Fireproof Storage Warehouse, Baltimore, Md.

Following the general discussion, the chair announced the election of officers, those being unanimously elected to serve during 1919 were Buel G. Miller, president; Fred L. Harner, vice-president, and Charles G. Wightman, secretary and treasurer, after which the meeting was adjourned to allow the members to become better acquainted.

The evening was given over to an excellent dinner, during which the members were entertained by professional talent. During the dinner, Charles S. Morris, Metropolitan Fireproof Storage Warehouse Co., New York, and president of the New York Van Owners' Association, gave a talk on "The Reasons for and Benefits of Organizations."

# Shippers' Index

A Guide to representative Transfer and Storage Companies arranged by States and Towns

## Return Loads Bureaus

**A** LIST of organized centers through which van and truck owners may arrange for return loads. Application for such should be made as far in advance as possible and in some cases a charge is made for the maintenance of the bureau.

City	Location and Telephone Number	City	Location and Telephone Number
<i>Connecticut</i>			
Bridgeport	Chamber of Commerce Noble 250	Omaha	407 So. 10th Street
Bristol	Chamber of Commerce 100	<i>New Jersey</i>	
Danbury	War Bureau or Chamber of Commerce 1308 or "Return Load"	Asbury Park	Board of Commissioners 2100
Greenwich	War Bureau	Carney	State Council of Defense
Hartford	Chamber of Commerce Charter 1856 or "Return Load"	Dover	Chamber of Commerce
Manchester	War Bureau 489 or "Return Load"	Elizabeth	Elizabeth Motor Transportation Club Elizabeth 2112
Meriden	Chamber of Commerce 242 or "Return Load"	Garfield	Police Station
Middletown	War Bureau 1245 or "Return Load"	Jersey City	Chamber of Commerce Montgomery 1110
New Britain	Chamber of Commerce 1533 or "Return Load"	Millville	Maurice River Transportation Co. 225
New Haven	War Bureau	Montclair	Police Department
New London	War Bureau 1642 or "Return Load"	New Brunswick	Home Defense League 1784
Norwalk	War Bureau 69 or "Return Load"	Newark	Motor Truck Club of N. J. Market 7945
Norwich	Chamber of Commerce 1747 or "Return Load"	Trenton	Chamber of Commerce 2128
Stamford	Chamber of Commerce	<i>New York</i>	
Waterbury	War Bureau 3570 or "Return Load"	Albany	Chamber of Commerce
<i>District of Columbia</i>		Buffalo	Chamber of Commerce
Washington	Chamber of Commerce	Ithaca	Mitchell 983
<i>Illinois</i>		New York City	Merchants' Ass'n, Woolworth Bldg. Barclay 7660
Chicago	State Council of Defense	New York	Van Owners' Association 144 Columbus Ave., Columbus 2089
<i>Indiana</i>		Rochester	Chamber of Commerce
Indianapolis	Chamber of Commerce	Syracuse	Chamber of Commerce
<i>Iowa</i>		<i>Ohio</i>	
Cedar Rapids	Chamber of Commerce	Cincinnati	Chamber of Commerce
<i>Michigan</i>		Cleveland	Chamber of Commerce
Detroit	Board of Commerce	Columbus	Chamber of Commerce
Flint	Chamber of Commerce	<i>Pennsylvania</i>	
<i>Missouri</i>		Philadelphia	Chamber of Commerce Widener Building
Kansas City	Local Sales Office of Republic	<i>Rhode Island</i>	
St. Louis	Chamber of Commerce	Providence	Chamber of Commerce

## Coming Events

### Meetings Scheduled by Leading Associations in the Industry

Canadian Warehousemen's Ass'n	Vancouver, B. C.	March 7 and 8
National Team & Motor Truck Owners' Ass'n, Inc.	Buffalo, N. Y.	June 16
Illinois Furniture Warehousemen's Ass'n	Third Monday of each month, except April.	Hotel La Salle, Chicago. Annual Meeting June 20
Pacific Coast Furniture Warehousemen's Ass'n	Los Angeles, Cal.	June
New York Traffic Club	Last Tuesday of each month, Waldorf-Astoria, New York. Annual Meeting	July
Texas Warehouse & Transfer Men's Ass'n	San Antonio, Texas	August 20
Southern Furniture Warehousemen's Ass'n	Jacksonville, Fla.	November
Massachusetts Storage Warehousemen's Ass'n	Third Thursday of each month, Exchange Club. Annual Meeting	January, 1920
Syracuse Traffic Club	Syracuse, N. Y. Third Thursday of each month. Chamber of Commerce. Annual Meeting third Thursday of January, 1920.	
Transfer & Storage Men's Ass'n of Montana	Billings, Mont.	February, 1920
Newark, N. J. Traffic Club	First Monday of each month, except November, Robert Treat Hotel, Newark, N. J.	

**BIRMINGHAM, ALA.****HARRIS TRANSFER  
AND WAREHOUSE COMPANY**

(Equipped to Handle Anything)

**MODERN FIREPROOF WAREHOUSE**

Special Attention Given to Packing and Shipping

When shipping to Birmingham, consign goods to Harris  
—he will look after your interests, also those  
of your customer

Offices: CHAMBER OF COMMERCE BLDG.

**LOS ANGELES, CAL.****Shattuck & Nimmo  
WAREHOUSE CO.****MOVING, STORING, PACKING  
SHIPPING**MERCHANDISE DISTRIBUTION  
FROM OUR OWN SPUR TRACKSMANUFACTURERS consolidating carloads  
for Southern California distribution are assured  
of efficient and prompt service by consigning  
them in our care. Rates on request.WAREHOUSEMEN, consign your household  
goods shipments to us for prompt distribution  
and quick returns.

## MEMBERS OF

Pacific Coast Furniture Warehousemen's Association, American  
Chain of Warehouses, National Distributing Division,  
Local Rotary Club and Chamber of Commerce**LITTLE ROCK, ARK****WAREHOUSING  
AND FORWARDING**Distributors of Pool Cars, Parcel Post Catalogs and  
Merchandise**TERMINAL  
WAREHOUSE COMPANY**

109-111 RECTOR AVENUE

All track connection

**BERKELEY, CAL.****STUDENTS  
EXPRESS & TRANSFER CO.**MOVING  
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2132 SHATTUCK AVENUE

YOUR ADVERTISEMENT  
IN THE**Shippers' Index  
Section**IS READ BY THE PEOPLE  
YOU MOST DESIRE TO  
GET IN TOUCH  
WITH**DENVER, COLO.****THE WEICKER  
TRANSFER & STORAGE COMPANY**

Office, 1017 Seventeenth Street

New Fireproof Warehouse on Track

Storage of Merchandise and Household Goods

Distribution of Car Lots a Specialty

Every Facility for Handling Safes, Boilers and Heavy  
Machinery. Complete Fleet of Motor Trucks and  
Modern Equipment

Members

American Warehousemen's Association  
Illinois Furniture Warehousemen's Association  
New York Furniture Warehousemen's Association  
Pacific Coast Furniture Warehousemen's Association  
Central Warehousemen's Club  
American Chain of Warehouses  
Southern Furniture Warehousemen's Association**HARTFORD, CONN.**

Tel. Connection Office: 335 Trumbull St.

Safety Vaults for Silverware

**GEORGE E. DEWEY & CO.**

JOSEPH M. PELCHAT Proprietor

Local and Long Distance

FURNITURE AND PIANO MOVING

Packing, Crating and Shipping of

PIANOS, FURNITURES, CHINA

Only Fireproof Storage Warehouse in Hartford

**NEW LONDON, CONN.****B. B. Gardner Storage Co., Inc.**

18 BLACKHALL STREET

PIANO AND FURNITURE PACKER, MOVER  
AND SHIPPER

Safe Mover—Freight and Baggage Transfer—STORAGE



## WATERBURY, CONN.

**The Ralph N. Blakeslee Co.**

TRANSFER AND STORAGE

Special Facilities for Moving Heavy Machinery and Safes

Storage Warehouse for Merchandise

Separate Apartments for Furniture

## WASHINGTON, D. C.

Moving  
Shipping  
Storing**Smith Transfer & Storage Co.**

Office: 912 S Street, N. W.

Let Us Handle Your Washington Business

WE WILL PLEASE YOU

## WASHINGTON, D. C.

**ARE YOU**

Looking for a firm that will handle your shipments

Promptly—Efficiently—Courteously

in Washington, D. C. ?

If so, consign your shipments care of

United States

Modern Fireproof  
Storage Warehouse

Storage Co.

418-420  
Tenth Street

Members N. Y. F. W. A. — I. F. W. A. — S. F. W. A.

## ATLANTA, GA.

**CATHCART****TRANSFER & STORAGE COMPANY**Moves, Stores, Packs, Ships  
Household Goods Exclusively

Office and Warehouse, 6-8 MADISON AVE.

## ATLANTA, GA.

Warehousemen

**MORROW****TRANSFER & STORAGE COMPANY**

COMMERCIAL STORAGE

Distributors—R. R. Trackage—Carloads a Specialty

Household Goods Moved, Stored, Packed and Shipped  
180-184 MARIETTA STREET

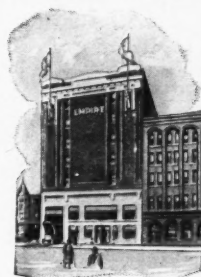
## BOISE, IDAHO

**PEASLEY****TRANSFER & STORAGE COMPANY**

STORAGE, TRANSFER AND FORWARDING

NINTH AND GROVE STREETS

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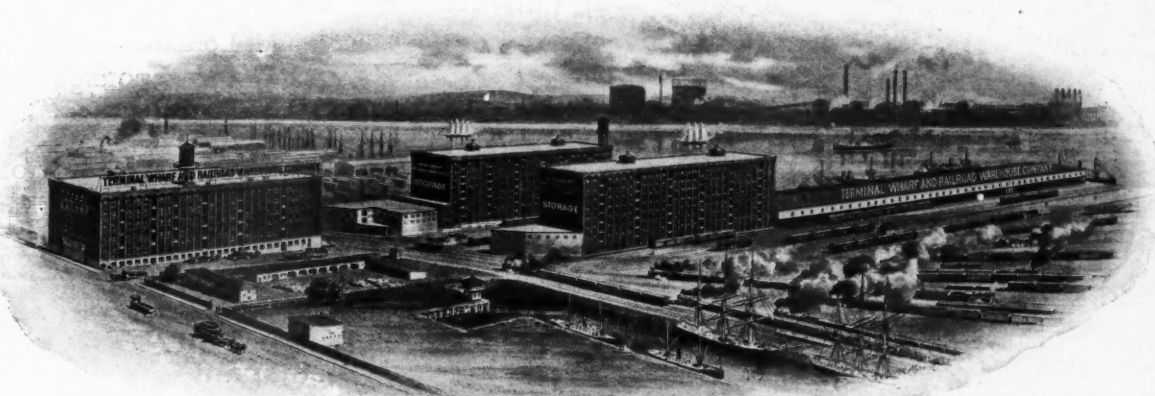
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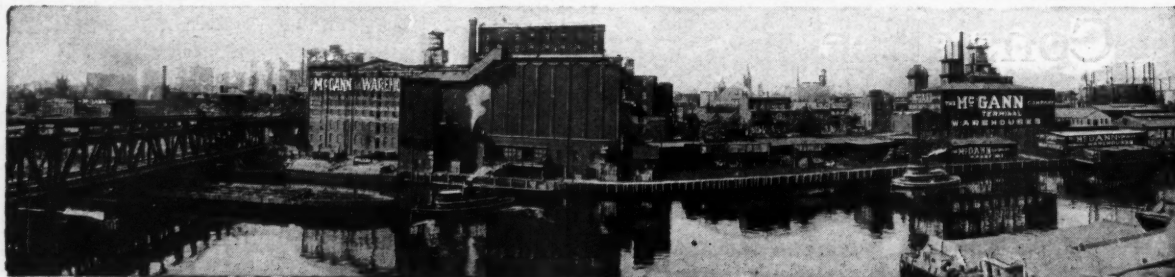
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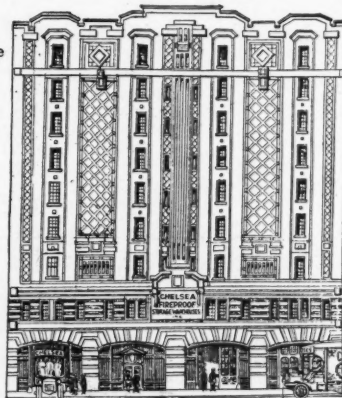
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Fireproof and Non-Fireproof

Business Established in 1867 and built up by

**A SERVICE THAT SATISFIES**

Prompt Deliveries by Motor  
Complete Transfer Facilities

Member  
of  
New York Furniture  
Warehousemen's  
Association  
and  
Illinois Furniture  
Warehousemen's  
Association

**FRED  
PAGELS**

937 West 8th St.

**On the first page of  
this section (page 37)**

will be found a list of such  
Return Loads Bureaus as  
have been reported as es-  
tablished. We will run  
this list regularly, extend-  
ing and correcting it from  
month to month as may  
be necessary.

CINCINNATI, OHIO

"STACEY FIRST"



**SERVICE**  
FIREPROOF AND NON-FIRE-  
PROOF WAREHOUSES

MODERN MOTOR  
VAN EQUIPMENT

**RELIABILITY**

Established 1891 Investment \$250,000  
Your interests carefully protected

**STACEY STORAGE CO.**  
2233 Gilbert Avenue

CLEVELAND, O.

We are Cleveland distributing agents for twenty-seven well known concerns. Why not let us handle your account?

Four large storage warehouses. Siding connections with Nickel Plate and Erie railroads right into buildings. Free switching from and to all roads. Our own team track for direct car-side distribution. Private wharf for river and Great Lakes traffic.

Ideally located for serving the downtown and industrial districts.

Modern equipment for the prompt and economical handling of all descriptions of merchandise.

Get our quotation on your proposition

**The International Transportation Company**  
**Warehouse Department**

General Offices: The Guardian Building  
CLEVELAND, OHIO

Long distance telephones: Main 7025, Central 39.

CLEVELAND, OHIO

**SERVICE IS THE THING**

For You and Your CLEVELAND Customers

LET US SERVE THEM AS  
THEY SHOULD BE SERVED

*Our Equipment*—Fireproof and Non-Fireproof Storage. Motors and Horse-Drawn Vans.

*Our Organization* is complete and is more than ample for the largest and most difficult proposition.

*We Conserve Your Interests*

**THE CENTRAL STORAGE  
WAREHOUSE CO.**

1843 East 55th Street  
5601 Hough Avenue

CLEVELAND, OHIO



7724 DETROIT AVENUE

CLEVELAND, OHIO

**The Lincoln  
Fireproof Storage Company**

5660-5704 Euclid Avenue  
Adjoining Penn. R. R. Euclid Avenue Freight Station and Team Tracks

CLEVELAND, OHIO

**NEAL  
FIREPROOF STORAGE COMPANY**

7208-16 EUCLID AVENUE

Modern Fireproof Buildings Carload Consignments Solicited

## CLEVELAND, OHIO

THE

**REDHEAD STORAGE CO.**

2041 E. 105th STREET

**MOTOR VAN SERVICE**Fireproof Warehouse  
Household Consignments Solicited  
Satisfactory Service Assured

Members I. F. W. A. N. Y. F. W. A.

## SPRINGFIELD, OHIO

Bill All Shipments for Springfield, Ohio, to

**WAGNER****FIREPROOF STORAGE & TRUCK CO.**

Siding on Pennsylvania Lines

Complete Facilities for Distribution of Pool Car Shipments  
Moving—Packing—Shipping—Storing  
Household Goods and Merchandise

## COLUMBUS, OHIO

THERE IS  
NOTHING TOO LARGE  
NOR TOO SMALL  
FOR US TO HANDLE**THE BUCKEYE  
TRANSFER & STORAGE COMPANY**

## TOLEDO, OHIO

**DEPENTHAL****TRUCK & STORAGE COMPANY**

108 SUMMIT STREET

Member of New York, Illinois, and Southern Furniture  
Warehousemen's Associations

## COLUMBUS, OHIO

THE

**KUTSCHBACH-McNALLY CO.**Complete Facilities for Storing and Forwarding  
**HOUSEHOLD GOODS and MERCHANDISE**

Siding on Pennsylvania Tracks

Manufacturers' Distributors **MOTOR Equipment**  
Member Interstate Warehousemen's Association

## TOLEDO, OHIO

**THE TOLEDO****MERCHANTS' DELIVERY COMPANY**

128 SUMMIT STREET

**AUTO SERVICE—FIREPROOF STORAGE**Household Goods and Automobiles Moved, Packed, Shipped and  
Stored. Safes, Boilers, Machinery and Smokestacks Moved.**100% SERVICE**

Reference: Second National Bank, or any bank in Toledo

## DAYTON, OHIO

**THE LINCOLN STORAGE CO.**

"Fireproof"

BIG 4 TRACK IN BUILDING. Members N. Y. &amp; I. F. W. A.

313-315 EAST FIRST STREET

A. B. Compton, Vice-President

## YOUNGSTOWN, OHIO

Local and Long Distance Hauling  
Manufacturers' Distributors Carload Distribution

## LIMA, OHIO

Manufacturers' Distributors

**EAGY TRUCK AND STORAGE**

320-322 NORTH CENTRAL AVE.

**MERCHANDISE and HOUSEHOLD GOODS**  
Motor Equipment, General Trucking, Long Distance  
Moving, Storage and Vans

## MANSFIELD, OHIO

**THE COTTER****TRANSFER AND STORAGE CO.****FIREPROOF AND NON-FIREPROOF  
WAREHOUSES**

Furniture and Merchandise Storage

Motor Trucks Heavy Hauling Distributing

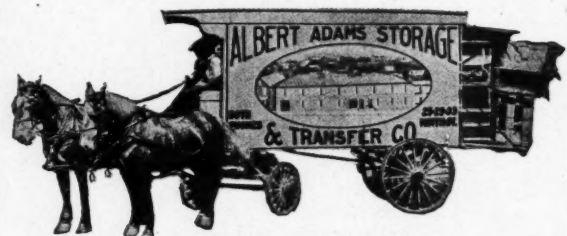
*The Cotter System*

Members New York, Illinois and American Warehousemen's Assns.

## ZANESVILLE, OHIO

**ALBERT ADAMS  
STORAGE AND TRANSFER CO.**

25-29-33 Ninth St.

Merchandise and Household Goods.  
Manufacturers' Distributors. Carload Distribution  
50,000 Square Feet of Floor Space

## SANDUSKY, OHIO

**The Island & Terminal Transfer Co.**JOHN A. MILLOTT, MGR.  
**TRANSFER, DRAYAGE and STORAGE**  
New Three-story Fireproof Building, also Non-fireproof  
Buildings**MERCHANDISE AND HOUSEHOLD GOODS**  
Complete Distributing Facilities Steamboat Landing and  
Railroad Siding

Notice this section grow.

This means that shippers find it useful.

This usefulness will increase with every addition.



**OKLAHOMA CITY, OKLA.**

Fireproof  
Warehouses for  
Household  
Goods and  
Merchandise.

Members of I. F. W. A.,  
New York, American  
Chain, Central, South-  
ern, Pacific Coast  
Warehousemen's Asso-  
ciation.



**O.K. TRANSFER & STORAGE CO.**

A. C. WEICKER, President

**TULSA, OKLA.**

**Tulsa Warehouse Company**

Inc. \$200,000

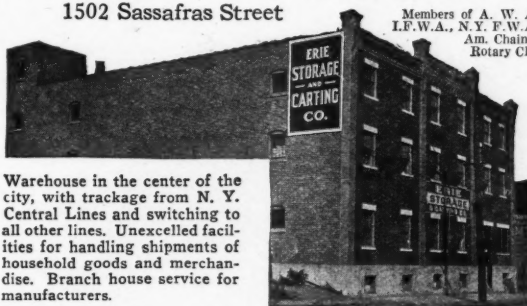
Our business is your business in Tulsa.  
We store your merchandise.  
We look after your shipments.  
We collect your drafts and accounts.  
We distribute your samples.  
We make you reliable credit reports.  
We trace your cars and save you demurrage.  
We furnish offices for rent to our patrons.  
We loan you money on your warehouse receipts.  
We give you real service promptly.  
If there is anything else we can do for you, our services  
are at your command.

ORRA E. UPP, President and Manager.

**ERIE, PA.**

**ERIE  
STORAGE & CARTING COMPANY**  
1502 Sassafras Street

Members of A. W. A.,  
I. F. W. A., N. Y. F. W. A.,  
Am. Chain &  
Rotary Club



Warehouse in the center of the  
city, with trackage from N. Y.  
Central Lines and switching to  
all other lines. Unexcelled facil-  
ities for handling shipments of  
household goods and merchan-  
dise. Branch house service for  
manufacturers.

**HARRISBURG, PA.**

**MONTGOMERY & CO.**

STORAGE WAREHOUSES

Merchandise Storage—Transferring—Forwarding

Direct Track Facilities

Pool Car Distribution

Members A. W. A. and American Chain of Warehouses

**LANCASTER, PA.**

**KEYSTONE STORAGE COMPANY**

STORAGE—DISTRIBUTORS—FORWARDERS

Merchandise and Household Goods

MANUFACTURERS' DISTRIBUTORS

MOTOR SERVICE

Siding on P. R. R. and P. & R.

**OIL CITY, PA.**

**CARNAHAN  
TRANSFER & STORAGE COMPANY**

R. C. LAY, Proprietor

Piano Moving a Specialty

Distributing and Forwarding Agents; Packing  
Fireproof Warehouse

**PHILADELPHIA, PA.**

**ADVANCE STORAGE  
COMPANY** 13-15 N. 59th STREET

SAMUEL S. JOHNSTON, Manager

WAREHOUSE 500 LOADS CAPACITY

Our motor trucks are operated by careful men who  
are thoroughly experienced in handling furniture  
and pianos.

We are in a position to guarantee you satisfaction  
and solicit your order.

**PHILADELPHIA, PA.**

**OUR HOBBY**

is the distribution of goods for  
National Merchandisers

**North Philadelphia Storage Co., Inc.**

SHIBE BALL PARK

**PHILADELPHIA, PA.**

**PENN  
STORAGE & VAN COMPANY**

2136 MARKET STREET

"Let Wightman do it"

**If the City  
To Which  
You Must Ship**

Is not represented in this  
index, communicate with the  
company nearest to it. In all  
probability they can handle  
the goods for you or at least  
suggest who should do so.

PHILADELPHIA, PA.

**ATLAS**

**STORAGE WAREHOUSE**

Office and Warehouse:  
Market and Thirty-seventh Streets,  
Philadelphia, Pa.

Member Pennsylvania,  
New York, Illinois,  
and Southern Furniture  
Warehousemen's Associations

Service is the measure of the difference between good work and poor.

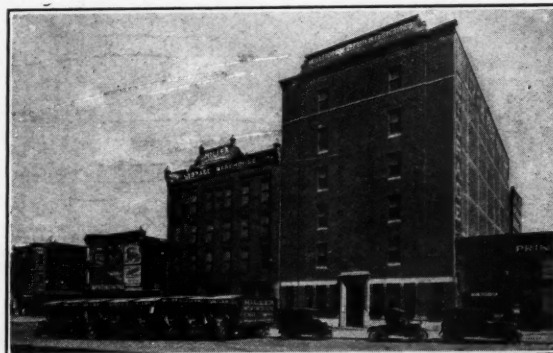
Service of the right sort in the storage, moving, packing and shipping of household goods and office furnishings exclusively, constitutes our business.

As it relates to shipments consigned to us, we interpret service to require safeguarding the interests of the shipping warehouse, prompt remittance of collections, fair charges and treatment to customers, and to all—courtesy.

We solicit your Philadelphia shipments.

For West Philadelphia and general city delivery consign C. L. and L. C. L. shipments—P. R. R., 36th and Market Sts. Station; B. & O. R. R., 24th and Race Sts. Station; P. & R. Rwy., 23rd and Arch Sts. Station.

PHILADELPHIA, PA.



Our large fleet of motor trucks enables us to render quick and efficient service to your patrons.

We are accessible to all depots and suburbs of our city. Our warehouses are within two blocks of North Philadelphia Station of the Pennsylvania Railroad and the 12th and York Streets Station of the Philadelphia & Reading or the Baltimore & Ohio.

Collections through our office will assure prompt returns.

*Fireproof and Non-Fireproof Warehouses*

**Miller North Broad Storage Co.**

2709-2721 North Broad Street

PHILADELPHIA, PA.

## Columbia Ave. Storage Company

1511 to 1519 Columbia Avenue

### EXCLUSIVELY HOUSEHOLD GOODS

Motor Equipment

Moving

Packing

Shipping

Operated by the

**TERMINAL WAREHOUSE AND TRANSFER CO.**

Delaware Avenue and Green Street

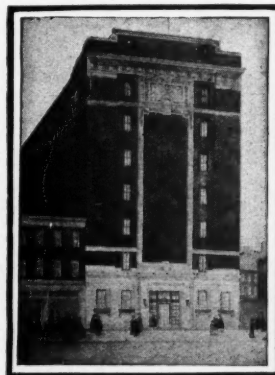
GENERAL MERCHANDISE

Forwarding and Distributing

9 Warehouses. 16 Acres of Floor Space. Trackage Facilities for 17 Cars.

Members { American Warehousemen's Association  
{ American Chain of Warehouses

PHILADELPHIA, PA.



## 20<sup>th</sup> CENTURY

THE LAST WORD IN WAREHOUSES

A solid concrete building. Best location in Philadelphia. A fleet of Pierce Arrow enclosed vans. We operate a large garage adjoining our warehouse capable of accommodating the largest van built. Try us when your van is in Philadelphia. All collections through our office promptly remitted. Members New York Warehousemen's Association.

**20<sup>th</sup> CENTURY STORAGE WAREHOUSE CO.**

3120-22-24-26-28-30 MARKET STREET  
(Opposite West Philadelphia Station P. R. R.)

PITTSBURGH, PA.



Fireproof  
I will grow four  
more stories



Garage & Stables

# **BLANCK'S Transfer & Storage Co.**

Moving, Packing and Storage  
MOTOR TRUCK SERVICE—SEPARATE ROOMS FOR STORAGE



Fireproof

6344

Penn

Ave.

E E



Fireproof

PITTSBURGH, PA.

# **HOEVELER WAREHOUSE COMPANY**

MOVERS AND STORERS

750 MILLVALE AVENUE

PITTSBURGH, PA.

# **MURDOCH**

STORAGE & TRANSFER COMPANY

General Office, and Warehouses

546 NEVILLE STREET  
PITTSBURGH, PA.

Branch Warehouse, Wilksburg, Pa.

Murdoch Means Service

PITTSBURGH, PA.

# **HASLEY BROTHERS TRANSFER AND STORAGE**

939 So. Canal St., N. S.

MOVERS, PACKERS, SHIPPERS OF HOUSEHOLD GOODS  
FIRE PROTECTED STORAGE—MEMBERS A. W. A.

PITTSBURGH, PENNA.

# **J. O'NEIL EXPRESS & STORAGE**

N. S. PITTSBURGH, PENNA.

Furniture and Piano Moving a Specialty. General Hauling.

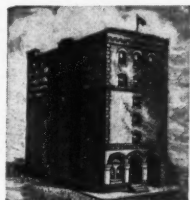
NEW FIREPROOF STORAGE HOUSE  
Separate Rooms

PITTSBURGH, PA.

# **We Serve Pittsburgh and Vicinity**



Shipments consigned  
in our care are in-  
sured careful han-  
dling and personal  
attention.



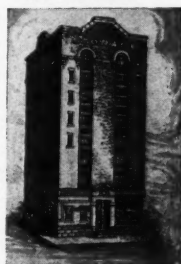
ESTABLISHED 1889 : INCORPORATED 1898  
CABLE ADDRESS: DON'TFORGETTOGETTHEMONEY

# **HAUGH & KEENAN**

Storage and Transfer Company

Centre and Euclid Avenues

Our experience of 28  
years and constant  
growth coming with  
such a long period of  
activity, enables us  
to safeguard the  
joint interests of our  
correspondents and  
their customers.



We have trackage on  
Penn'a. Railroad  
(East Liberty Sta-  
tion) direct to ware-  
house; padded vans,  
both motor and horse  
drawn, thoroughly  
skilled workmen,  
2,000,000 cubic feet of  
storage space.

PITTSBURGH, PA.

Building 100 x 125—8 Stories Front  
9 Stories Rear—Garage in Basement—Just Completed



# **Shanahan Transfer & Storage Company**

Fireproof Storage for Household Goods.

All Separate—1200 Fireproof Rooms.

Furniture Moved and Packed for Shipment.

Motor Vans, Trucks.

Special Heated Piano Floor

Fifth Ave. at McKee Place

(Next Door to You)

Established 1865.

Over 50 Years



## PITTSBURGH, PA.

**WEBER**  
**EXPRESS & STORAGE COMPANY**  
 GENERAL HAULING  
 Moving, Packing and Storing of Furniture and Pianos  
 4 6 2 0 HENRY STREET

## SCRANTON, PA.

"The World Moves—So Does Post"

**R. F. POST**  
 ESTATE  
 4 4 LACKAWANNA AVENUE  
 Freight, Furniture, Pianos, Safes, Machinery, Boilers, Stacks, etc.  
 DRAYMAN, RIGGER, AND WAREHOUSE

## SCRANTON, PA.

Established 1894.

"He Profits Most Who Serves Best"

**The Quackenbush Warehouse Co.**  
 Incorporated.  
 Warehousing of every description: Storing, Packing, Carting,  
 Shipping. R.R. Siding. Manufacturers' Distributors.  
 Correspondence Solicited.  
 Wilkes-Barre, Pa. Scranton, Pa.

## WILKES-BARRE, PA.

Established 1894

"He Profits Most Who Serves Best"

**The Quackenbush Warehouse Co.**  
 Incorporated  
 Warehousing of every description. Storing, Packing, Carting,  
 Shipping. R.R. Siding. Manufacturers' Distributors.  
 Correspondence Solicited.  
 Wilkes-Barre, Pa. Scranton, Pa.

## PROVIDENCE, R. I.

## CADY MOVING &amp; STORAGE CO.

STORAGE WAREHOUSES  
 Household Furniture and Pianos  
 Packing, Crating and Shipping.  
 62 to 70 Dudley Street.

## CHATTANOOGA, TENN.

**THE CHATTANOOGA**  
**TRANSFER & STORAGE CO.**

Fireproof Warehouse

Furniture Merchandise  
 Packed Stored Shipped  
 Heavy Hauling  
 Motor and Horse Drawn Equipment

## NASHVILLE, TENN.

**E. M. BOND**  
**FIREPROOF STORAGE CO.**  
 HOUSEHOLD GOODS AND MERCHANDISE  
 Modern Fireproof Building  
 Private Siding With All Rail Connections.

## EL PASO, TEXAS

**WESTERN**  
**TRANSFER & STORAGE COMPANY**  
 220-26 S. STANTON STREET  
 ONLY FIREPROOF STORAGE IN EL PASO  
 Forwarders and Distributors—Trucking of all kinds—Distribution  
 Cars a specialty—Warehouse on Track

## FORT WORTH, TEXAS



**Binyon-O'Keefe**  
**Fireproof Storage Company**

Est. 1875

Your consignments to Fort Worth  
 will receive intelligent service. We  
 have a siding on the Rock Island Rail-  
 road with free switching from all lines.  
 Fireproof warehouse, 90,000 sq. ft.,  
 yard storage, factory distributors.

Members of

Illinois Furniture Warehousemen's Association  
 Southern Furniture Warehousemen's Association  
 Central Warehousemen's Association

## TACOMA, WASH.

Phone Main 7738  
 " " 228



**Pacific Storage and Transfer Co.**

Distributors of Pool Cars

**TRANSFER AND STORAGE**  
**SHIP YOUR GOODS IN OUR CARE**

1721 Jefferson Avenue

These Advertisements are arranged geo-  
 graphically by States and then by towns,  
 thus localizing the companies for conveni-  
 ence of shippers.

## YAKIMA, WASH.

**MILLER & LENINGTON**

CONTRACTORS

DISTRIBUTING *and* FORWARDING AGENTS

TRANSFER—STORAGE—WAREHOUSING

Motor Trucks and Team Equipment for All and Every Kind of Hauling

SHIP IN OUR CARE and let us be "At your service with best of service"

Office: 10 East A Street

Sidney Hotel Bldg.

'Phone 571

## YAKIMA, WASH.

J. J. Crawford

W. E. Norton

**Yakima Transfer Co.**  
STORAGE

Auto Trucks and Moving Vans

Office and Warehouse:  
11 SOUTH FIRST AVENUEFreight, Baggage and Piano Moving a Specialty  
New Warehouse for General StorageMerchandise Storage, Transferring, Packing  
and Forwarding — Pool Car Distributing —  
Direct Track Facilities.**G. W. Jones Lumber Co.**

807 Lumber Exchange Building

CHICAGO

Manufacturers of

CRATING AND BOXING LUMBER OF ALL KINDS

We refer you to the leading warehouses in  
Chicago as to the quality of stock we ship.

Wholesale Prices

Stock Guaranteed

**There Are Two Parties  
To Every Shipment**

Try to make your company the shipper or the consignee of every important movement in your city.

Keep in touch with your colleagues through these columns.

**A Shipment  
Started  
Right Can't  
Go Wrong**

Start your shipments out right and they will reach the customer safely and on time. Pack securely and mark correctly, that's the rule to follow.

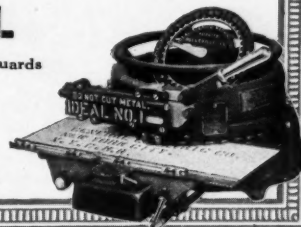
Don't trust to writing addresses on goods—you don't write business letters by hand. Your shipping clerk is not a sign painter.

Ideal Service will pay its cost in a few months. One lost shipment might be equal to the price of a good many machines. A list of users includes Ford, Edison, Standard Oil and thousands of others. There's nothing equal to the IDEAL and we can prove it.

By getting our literature you pay nothing for information hundreds of shippers have paid in bitter experience to learn. You want the best way of marking your goods and we can help you. Write.

**The IDEAL**

"The Machine That Safeguards Shipments"

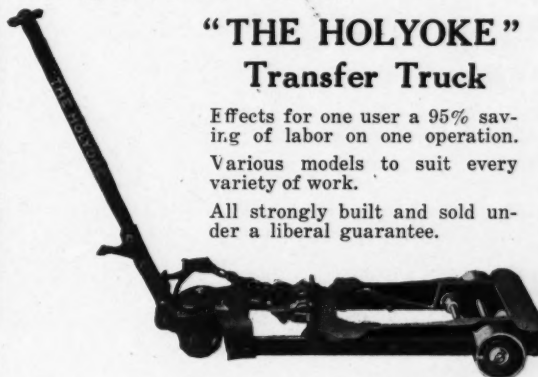
IDEAL STENCIL  
MACHINE CO.31 Ideal Block  
BELLEVILLE ILL.**SPEED and EASE mean a  
Saving of TIME and LABOR**

In choosing an elevating truck consider the combination of an incline rolling on a wheel—two parts only—fool proof mechanism. Can't go wrong in any severe service.

**"THE HOLYOKE"  
Transfer Truck**

Effects for one user a 95% saving of labor on one operation. Various models to suit every variety of work.

All strongly built and sold under a liberal guarantee.



Write for Circular B-1

**Holyoke Truck Company**

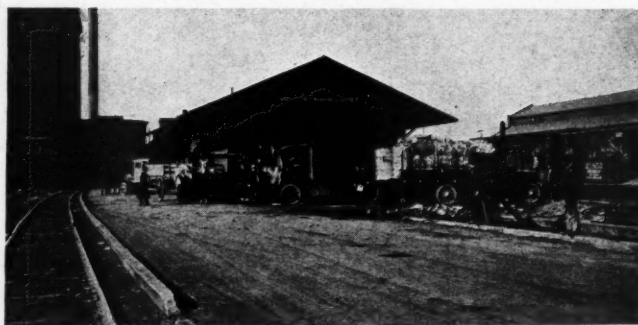
Main Office and Factory

105 Race Street, HOLYOKE, MASS.



# POOL CARS DAILY BETWEEN ALL POINTS

Tell us what you have  
to ship and when and  
where it is to go.



First and Water Streets, Louisville, Ky.

## Economy in Shipments

and increased promptness are secured by using the facilities we offer. We have our own track connections and affiliated warehouses in all important centers.

We are in constant touch with all matters concerning transportation—both Domestic and Export.



Foot of West 26th Street, North River, New York.

Shipments cleared for all  
parts of the world.

Lowest ocean freight and  
insurance rates obtained.

C. O. D. collections ef-  
fected, and prompt re-  
turns made.

Furnish us with details  
of your prospectus. We  
will wire you prompt  
quotations, rates, routes,  
etc.

**WRITE, PHONE OR WIRE**

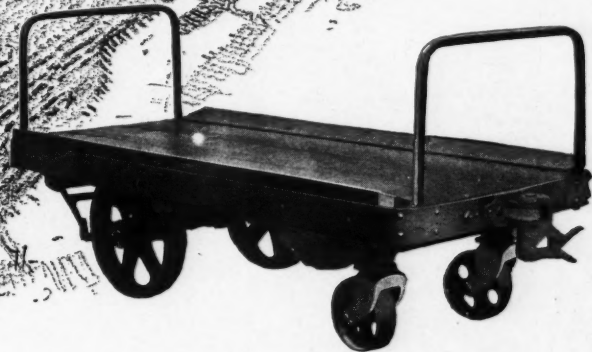
**Louisville Public Warehouses**  
Louisville, Ky.

**Universal Forwarders, Inc.**  
29 Broadway, New York

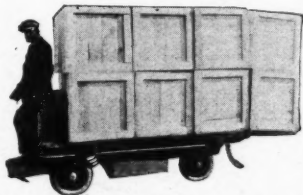


THE BRONX

BATTERY PARK



## Government Buys Seven-Mile Train of Lansing Trailers



Lansing Electric Load-carrying Truck—Capacity 5,000 Pounds

Four thousand Lansing Trailers—a train of trailers seven miles long—a train that would extend from Battery Park half way to the Bronx and fill 80 freight cars when ready for shipment—that's the extent of the government's indorsement of Lansing Trailers.

The government has practically standardized on Lansing Trailers and also has fleets of Lansing Electric Tractors and Trucks in base depots and warehouses in French and American ports—loading and unloading ships—speeding up the delivery of package freight.

Because they are durable—because they save time, labor and money, Lansing Electric units also have been adopted by many American manufacturers during the last seven years—

have received the same high indorsement that the government has placed on Lansing products.

We'll gladly send you complete information about Lansing Tractors, Trucks and Trailers. Our engineers will furnish you with facts and figures—estimate the saving that will be effected by Lansing units in your plant. Write for our catalog.

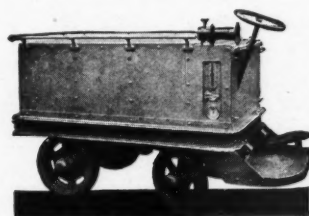
*We have an attractive dealer proposition for distributors in open territory.*

### LANSING-COMPANY

311 East Saginaw St., Lansing, Mich.

#### BRANCHES

NEW YORK KANSAS CITY BOSTON CHICAGO  
MINNEAPOLIS PHILADELPHIA SAN FRANCISCO  
Lawrence Motor Co., Columbus, Ohio, Distributors  
for Ohio and Western Pennsylvania.



Lansing Industrial Electric Tractors are built with trailer load capacity of 18,000 to 25,000 pounds.

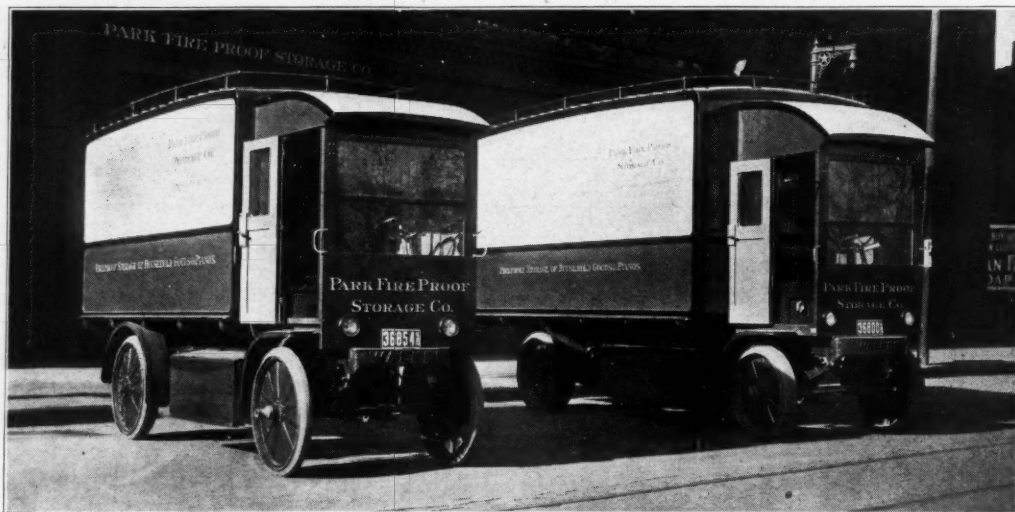
# LANSING

COMPANY

## "KEEP YOUR PRODUCT ON WHEELS"

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

# Walker Electric Trucks



Walker Electric Trucks are used by The Park Fire Proof Storage Co., Chicago

**A**BOUT terminals, on docks, in warehouses and garages and all similar places where fire prevention regulations are stringent, fire hazards are not only minimized, but lower insurance rates are the result of using Walker Electric Trucks.

The predominance of Walkers in this service proves also that they give economy day and night, summer and winter.

## Walker Vehicle Company

*America's Largest Manufacturer of Electric Trucks and Tractors*

New York

CHICAGO

Boston

# Lowest trucking cost

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



## OVERLAND TRANSIT

Last winter a MACK Truck broke the freight blockade for the Goodyear Tire and Rubber Company and made a new freight record between Boston, Mass., and Akron, Ohio.

Through deep snow—weather 15 degrees below zero—a 3½ ton MACK Truck made the 504 mile run in 61 hours. (R. R. freight schedule under normal conditions 168 hours.)

This truck has since maintained a regular express service between Boston, Mass., and Akron, Ohio—in all weathers, under all conditions of load and road—a remarkable record—a good sample of MACK Truck performance.

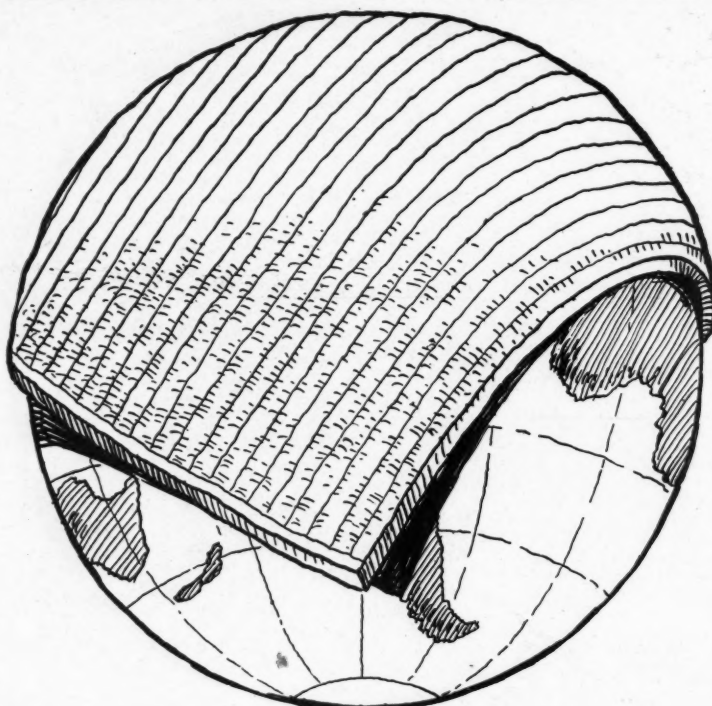
Let us tell you of other MACK Truck achievements—other records of endurance, power, economy of operation—that demonstrate MACK Truck fitness for hard, heavy hauling. Send for our catalogues.

MACK capacities 1 to 7½ tons, with trailers to 15 tons.

**INTERNATIONAL MOTOR COMPANY**  
NEW YORK

*“Performance Counts”*





## ***Protects the World on Moving Day***

Not only the first of May, but every day is Moving Day in the Business World. Moving goods from your store to some customer's home—that is your Moving Day. They saw them spick and span and without a scratch in your store. They expect to see them in their own home in that same perfect condition. The way to do it is to equip your wagons with

### **Loupilco Furniture Pads**

Moving Day is always an expense, but with Loupilco Furniture Pads on your wagons you have made sure of keeping that cost down to the minimum. They save you all the cost of adjustments for broken, scratched, defaced goods. Prevent dissatisfied and lost customers. Compared with your present moving cost, they are big profit earners. They earn their cost on almost every trip.

#### **Loupilco Furniture Wagon Pads, made in three sizes:**

68 x 80 Khaki color.....	\$34.00 per dozen
52 x 68 Khaki color.....	25.50 per dozen
36 x 68 Khaki color.....	19.00 per dozen

#### **Loupilco Hood Pads, made to fit over beds and table tops:**

Head Board and Table Pad, two-in-one.....	\$5.00 each
Foot Board Pad.....	3.00 each
Complete Set .....	8.00 each

#### **Loupilco Music Cabinet Pads made full size to fit large size machines:**

Khaki color .....	\$5.00 each
-------------------	-------------

**TERMS: 2% 10 DAYS. NET 30 DAYS. F.O.B. LOUISVILLE. PRICES QUOTED FOR IMMEDIATE ACCEPTANCE.**

Manufacturer of Pillows, Mattresses and Furniture Wagon Pads

**LOUISVILLE BEDDING CO.,**

Incorporated

Owners Louisville Pillow Co.

LOUISVILLE, KY.

# One Government Act Tells the GMC War Story

**O**NE official act of the United States Government tells in the simplest way the outstanding story of GMC trucks in war.

When the War Department sought to solve the problems growing out of too many models in motor transport, standardized truck sizes resulted.

Where no commercial model could be found to fit the exacting requirements, government specifications supplied the lack.

When it came to the  $\frac{3}{4}$ —1 ton truck, there was a commercial chassis ready built.

**It was the GMC Model 16.**

It had already been proved in ambulance service on the Mexican Border.

It had served the Allies ably in ambulance work before the United States entered the war, and was selected by the Medical Department in anticipation of the United States joining the Allies. Thousands were subsequently purchased for ambulance service. Later in the war, when the Government decided to select a truck chassis to be adopted as Class "AA" for all military purposes, this GMC Model 16, strictly on its merits, in competitive tests, in the hands of Government officials, and subjected to the most exacting trials, made a perfect score, and it became the official Government standard—picked as it stood.

Because of the enormous Government demand our production on this model had reached the point at the close of the war which now enables us, by continuing full speed ahead, to offer the trade this same model at our pre-war price of \$1495, a reduction of \$280.

This is the truck that made good in France, Belgium and Italy in the days of battle; and it will continue to make good in peaceful pursuits.

This history-making Model 16 is but one of six good trucks built in the GMC factory; every one of which has equally as good a record—even though less spectacular—in more than two hundred lines of business—**prices reduced on all models.**

**GENERAL MOTORS TRUCK COMPANY**  
**Pontiac, Michigan**

*One of the units of the General Motors Corporation, also builders of  
Cadillac, Buick, Oldsmobile, Oakland and Chevrolet Cars*

**GMC TRUCKS** (436)

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

The Seal of Dependable Performance



Trade Mark Registered U. S. Patent Office



## The Truck That Never Failed

No better illustration of why Acme enjoys re-sale records of 100% is to be found than in the following letter written by the Western Crucible Steel Casting Co., Minneapolis, to a prospective purchaser. Read this letter and get a new slant on truck performance.

"September 14, 1917, we purchased, through the Brehm-McMullen Company of this city, one 2-ton Acme Truck. This car has been in actual service since September 14, 1917, to date, having been in that time out of service in all, six days at intervals; this time being lost in cleaning our carbon and grinding in valves. All the repair bills and other up-keep bills from September 14, 1917, to date, have been \$20.10.

"In May, 1918, we purchased a 1-ton Acme Truck, and so far have not spent one cent for repairs. When the call came for trucks to handle supplies in

the fire devastated districts of northern Minnesota, we sent this 1-ton truck and driver with the State Militia. This car was in actual service for ten days, running night and day. No truck was ever put to a more severe test than this one. This car averaged from 50 to 75 miles a day, over roads that seemed impassable, and came home just as good as when it left.

"I tell you the above, so that you can see why we like the Acme Truck, as so far it has never failed us. We are about to contract for another 3-ton Acme as our business demands it. You will make no mistake when you place your order for an Acme Truck."

No wonder the Acme is the truck that transfer and storage men look to for the solution of their hauling problems, because under severest stress and strain the Acme has never failed to produce more than the expected standard of performance.

**ACME MOTOR TRUCK COMPANY, 338 Mitchell St., Cadillac, Mich.**

### ACME PROVED UNITS

The **WHY** of Acme success. Every unit endorsed by the greatest engineers of the industry.

Continental Red Seal Motor  
Timken Axles  
Timken Bearings  
Timken-Detroit Worm Drive  
Cotta Transmission  
Borg & Beck Clutch  
Ross Steering Gear  
Blood Bros.' Universal Joints  
Detroit Springs  
Artillery Type Wheels  
Eisenmann High Tension Magneto  
Rayfield Carburetor  
Stewart Vacuum Feed  
Tubular Type Radiator  
Centrifugal Type Governor



Built in 1 to 5 ton models—  
Oversize in capacity and dimensions. Bodies built in our own factories.

Write for our booklet, "Pointers to Profits" which gives some interesting facts regarding Acme.

Write for a list of some of the users of Acme trucks in the transfer and storage field, together with letters showing the unusual service they have given with economical operation.

**RETURN LOADS WILL CUT YOUR HAULAGE COSTS**





# FISK SOLID TIRES

—dependable

**T**RUCKS can't afford  
to lose time.

Minutes count in the de-  
livery of merchandise.

Good tires prevent delays.

Dependable tires are built  
to wear, and meet the  
rugged conditions en-  
countered in actual use.

Fisk Solids are depend-  
able—you buy them with  
confident knowledge that  
you are making a wise  
and permanent invest-  
ment.

**THE FISK RUBBER CO.  
OF N. Y.**

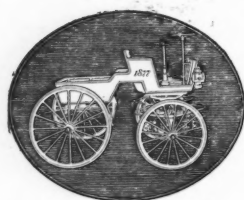
Chicopee Falls, Mass.

# Selden Trucks

Among the numerous users of  
SELDEN TRUCKS are many of the  
largest and oldest established busi-  
ness organizations in America.

SEARS, ROEBUCK & COMPANY  
CHICAGO

*for instance*

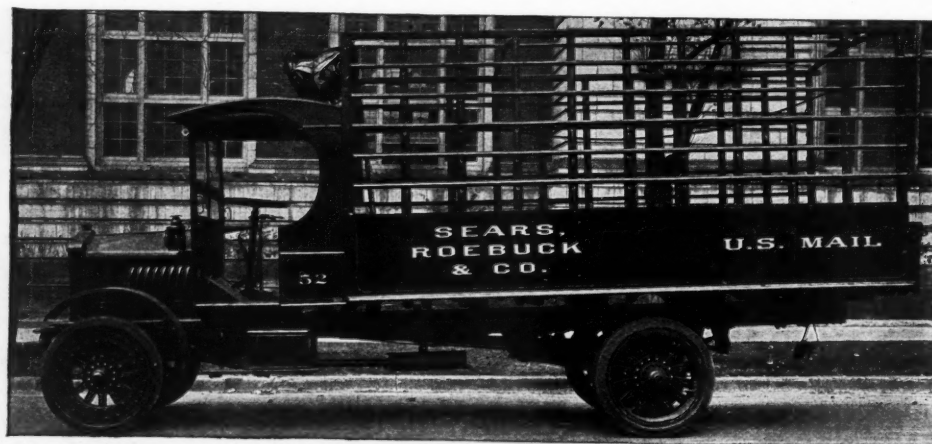


1877-1919

The first gasoline motor propelled road wagon was a SELDEN. The present types of SELDEN TRUCKS are the result of years of continuous experiment, observation and experience in manufacture since the day of their inception in 1877.

One to Five Ton Worm Drive Models. Write for full information.

SELDEN TRUCK SALES COMPANY  
ROCHESTER, N. Y., U. S. A.



PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

# Announcing Two Improved Models



*The "Yellow Chassis"  
Trucks that serve so  
well—*

---

Republic Dispatch, with Express Body and Canopy Top -	\$1095.00
Republic Special, with Express or Stake Body -	1295.00
Model 10: 1 Ton, with Express or Stake Body -	1535.00
Model 11: 1½ Ton, Chassis	1885.00
Model 19: 2-2½ Ton, Chassis	2395.00
Model 20: 3¼ Ton, Chassis	3450.00

---

*All prices F. O. B. Alma, Mich.*

**Model 19—Republic Invincible—2-2½ Tons**

**Model 20—Republic Dreadnaught—3½ Tons**

Founded on experience gained through building more than 50,000 motor trucks, Republic announces two improved models.

Developed from a careful study of the needs of motor transportation in every industry and business and under every road, load and climatic condition encountered in the 27 countries in which the "Yellow Chassis" Trucks have served so well.

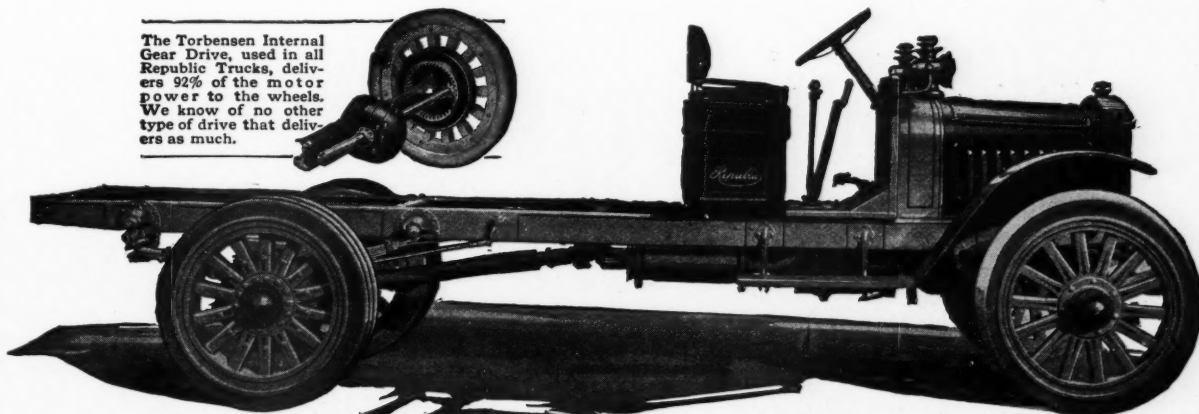
In basic design these improved Republic models adhere to Republic practice which has amply proved its correctness through five years of constantly increasing public confidence. But many improvements have been made to give increased service and value.

Continental motors of great power are used in both models. A 4-speed transmission adds flexibility. Enlarged radiators give increased cooling capacity equal to any emergency. Perfected oil governor absolutely controls speed and delivers full power at all speeds. Rear spring suspension constructed according to government design. And every mechanical feature is kept in perfect balance with the truck as a whole. Every improvement that could be logically dictated from Republic's vast experience, has been incorporated in the Republic INVINCIBLE and the Republic DREADNAUGHT. We believe they set new standards of truck value that truck users will be quick to appreciate, and they are ready for immediate delivery.

More than 1400 Republic Service Stations insure continuously satisfactory service to every Republic user.

REPUBLIC MOTOR TRUCK CO., INC., ALMA, MICH.

The Torbensen Internal Gear Drive, used in all Republic Trucks, delivers 92% of the motor power to the wheels. We know of no other type of drive that delivers as much.



Model 19—Republic INVINCIBLE, 2-2½ Tons

# REPUBLIC

*Internal Gear Drive*

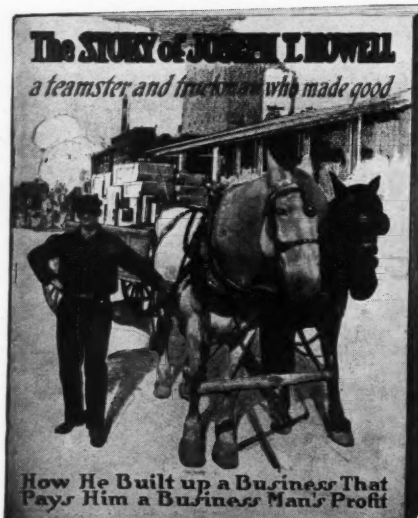
## MOTOR TRUCKS

*Built by the Largest Manufacturers of Motor Trucks in the World*

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



## Send For This Book



**I**T is the true story of how a small trucking business grew to be a big, profitable one—from a horse-drawn wagon to a fleet of three motor trucks.

This book contains very valuable information for the truckman—information that is of vital importance to success.

Send in your request today. The book is absolutely free.

**The J. C. Wilson Company**  
Detroit, Michigan



## TRANSVEYORS

- promote system.
- accelerate internal traffic.
- reduce labor costs.
- eliminate re-handling.



A line to Truck Headquarters will bring you full data on Transveyor accomplishments in Transfer and Storage.

### COWAN TRUCK COMPANY

12 WATER ST.  
HOLYOKE, MASS.

# Trailmobile

Trade-Mark Reg. U. S. Patent Office

The Motorless  
Motor Truck  
—  
**Thousands  
in Use**

**SIZES**  
1,250 lbs.  
1,500 lbs.  
2,000 lbs.  
3,000 lbs.  
4,000 lbs.  
7,000 lbs.  
10,000 lbs.

Also semi-trailers  
—  
Bodies for every  
business.

### Doubles Capacity—Cuts Cost

**F**URNITURE requires large load space in proportion to its weight. This Trailmobile in the service of the H. T. Cushman Manufacturing Company of North Bennington, Vt., doubles the load capacity of the 1½ ton truck.

It cost one-third as much as a truck the same size, requires no driver, and adds only 10 per cent to fuel and maintenance costs. It enables the truck to haul three tons at a trifle more than 1½ ton costs. Operating between different cities in the Green Mountain State it delivers the product to towns round about and brings material to the factory. The method saves packing and two or three handlings between plant and purchaser.

The load shown is on its way from North Bennington, Vt. to Northampton, Mass.

The Trailmobile is built like a truck with truck axles, bearings, frames and wheels to haul truck loads at truck speeds and to track perfectly behind truck or passenger car.

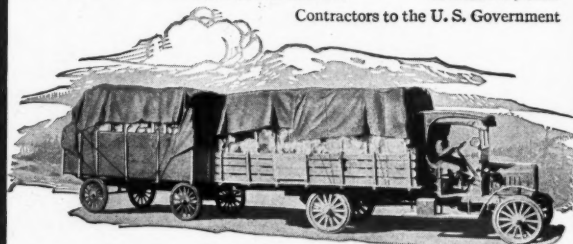
Write for booklet, "Economy in Hauling"

The Trailmobile Company

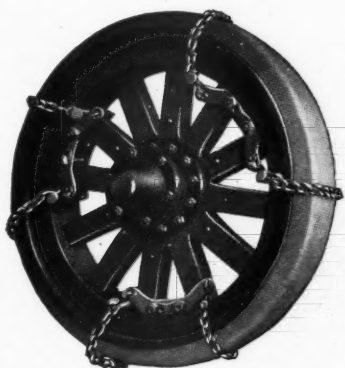
515-535 E. Fifth St.

Cincinnati, Ohio

Contractors to the U. S. Government



Good roads are preserved by reducing the load carried on each wheel.



## Giant Grip Traction Chains *For Motor Trucks*

With a set of Giant Grip Traction Chains in the tool box, the truck driver is assured of positive traction at all times.

The time element in the transfer and moving business is an important item. Take every precaution to assure maximum operating time.

Carry a set of Giant Grip Traction Chains in the tool box—summer and winter—especially if your trucks are engaged in inter-city haulage.

Giant Grip Chains can be put on or taken off in two minutes—no tools—no jacking up of truck—no snap locks to rust tight or fly open—chains are made in units of short length—easily applied. Made for every type of wood and steel wheel.

Write us for literature—see your dealer.

**EQUIP WITH  
GIANT GRIP**

**CHALLONER COMPANY**

*Established 1863*

OSHKOSH, WISCONSIN



*“Keep to Your Schedules in  
Spite of the Weather” is  
Industrial America’s Slogan*

OWNERS in the transfer and storage business realize that during this winter, their transportation departments must not be interrupted—their schedules must be maintained. Naturally Kissel Trucks, equipped with the **ALL-YEAR Cab**, have become first choice.

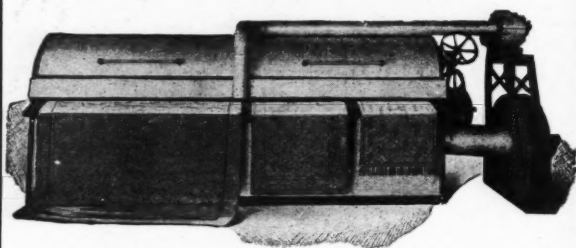
The *ALL-YEAR Cab* is the only perfected means of protecting drivers during winter’s stormy days, or any disagreeable weather. Its patented features increase results to owners by keeping trucks in operation the year ’round.

You should not delay in seeing your nearest Kissel Dealer if you want uninterrupted haulage and delivery of materials or finished goods.

**Kissel Motor Car Co.**  
HARTFORD, WIS., U. S. A.

# KISSEL TRUCKS

**Because there is  
Big Money in It**  
storage and warehouse  
companies are installing  
this big rug cleaning  
machine



*The most perfect Rug Cleaner made*

**The Cleveland Laundry Machinery Mfg. Co.**  
CLEVELAND, O.

## Azoturia



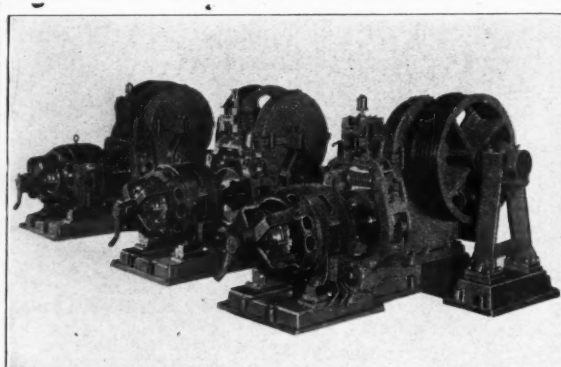
TRADE MARK

MORE HORSES DIE OF AZOTURIA during the month of March than any other month in the year. Are you going to wait until you lose one or two of the best horses in your stable? Figure it out in dollars: A TEN DOLLAR BILL will buy six bottles of DR. PYLE'S FAMOUS AZOTURIA REMEDY. Compare this small amount with your live stock investment; CAN YOU AFFORD TO BE WITHOUT THIS PROTECTION? You can use it as a preventive as well as a cure.

**OUR GUARANTEE IS AS STRONG  
AS A GOVERNMENT BOND**

Price \$2.00 Per Bottle      \$20.00 Per Dozen  
At Dealers      — or —      Direct

**The Dr. Pyle Veterinary Remedy  
Co., Inc.**  
New Philadelphia, Ohio      U. S. A.



## UNCLE SAM

Ordered 5 elevators like this for storage  
Houses

## AT PANAMA

Are they Good Enough for You?

**Colley Elevator Co.**  
CHICAGO

Orders Are Now Being  
Received for the

Third Edition

of the

## Transfer & Storage Directory

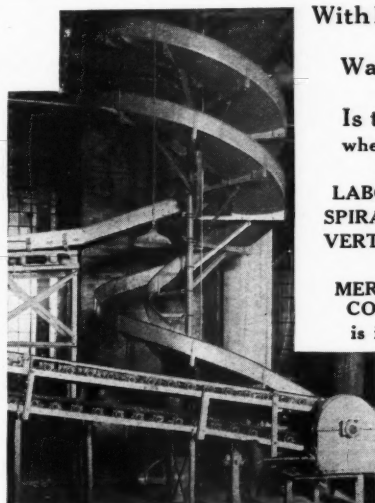
Over 2,000 alterations and additions  
have been made in this book and every  
care has been exercised to make it as  
complete and accurate as possible

Price \$3.00 a Copy

SENT POSTPAID TO ANY ADDRESS

TRANSFER & STORAGE PUBLISHING CORP.  
U. P. C. BUILDING, 239 W. 39th STREET  
NEW YORK, N. Y.





With Help Scarce  
AND  
Wages High  
NOW  
Is the Time  
when the need  
for our  
LABOR-  
SAVING  
SPIRAL CHUTES  
VERTICAL LIFTS  
AND  
MERCHANDISE  
CONVEYORS  
is imperative

Owned by  
The Haslett  
Warehouse  
Co., of San  
Francisco,  
the develop-  
ment of  
handling

problems in our own fourteen general merchandise store-  
houses has enabled us to give practical advice to ware-  
house and terminal concerns. We are at your service.

Through long experience we have learned how to com-  
bine every form of merchandise conveyor so as to obtain  
the most practical results.

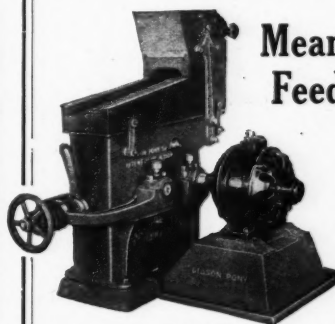
When no standard form of conveyor is adequate, we  
design special machines.

When you want information on conveyors, write us.  
We can help you.

### The Haslett Spiral Chute Co.

Factory: Madison and 20th Sts., Philadelphia, Pa.  
Southern Office: 523 Calvert Bldg., Baltimore, Md.  
Pacific Coast: 228 Pine St., San Francisco, Cal.

## Crushed Oats!



Patented

Means Conservation,  
Feed Less in Weight

Your Stock  
Gets *More*  
Nutriment  
from *Less*  
Oats

Machine now built under United States Food  
License L000086 U. S. A.

1st. Your stock is built up in bone and muscle.  
No colic, or stomach trouble.

2nd. You feed 15% to 20% less in weight, which  
saves you money and helps your "Uncle  
Sam" win the war.

Thousands of users will recommend  
Crushed Oats

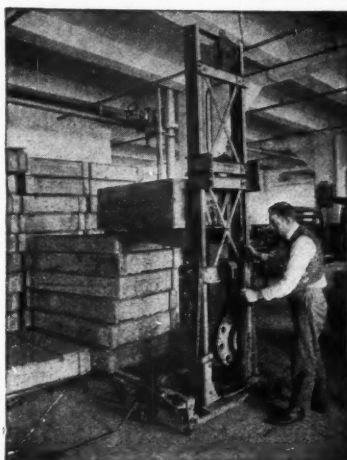
Write us for further information.

### GIBSON OAT CRUSHER CO.

McCormick Bldg.

[Chicago, Ill.]

Eastern Office: 151 East 38th Street, New York City



### Save Labor Piling Paper

ONE or two men with a Revolvator will do  
the work of several men in piling rolls of  
paper or other heavy goods.

This machine not only *saves labor* but enables  
you to utilize all your storage space. It permits  
piling rolls, barrels, cases, bales, etc., clear to the  
ceiling.

Write for Bulletin T-42

### REVOLVATOR CO.

389 Garfield Avenue, Jersey City, N. J.

Sales Agent for New York Revolving Portable Elevator Company



Save  
Time  
and  
Labor  
Sawing  
Boxing  
and  
Crating  
Lumber

This neat, compact saw can  
be hung up against any con-  
venient wall or column, thus  
taking up no valuable floor  
space.

### The Reliance MOTOR DRIVEN Swing Saw

will save the time and energy  
of hand cutting—do the work  
much better and faster—and,  
being self contained, can be  
placed anywhere, regardless  
of power supply.

Easily installed by anybody.  
Direct or alternating motor.  
Built in three sizes, to accom-  
modate any class of work.

Tell us your requirements  
and we will submit proposals.

Reno-Kaetker Electric Co.  
Gerke Building, Cincinnati, Ohio



*The economical method of hauling*

*Capacity 2 to 5 tons*

*Manufactured by*

**ONE-WHEEL TRUCK COMPANY**

ST. LOUIS, MISSOURI

## If Your Horseshoer Uses "Capewell" Nails



in shoeing your horses it will be the best thing for you economically—and for the horse's feet.

The Capewell is the safest, most reliable and easiest nail to drive.

Demand the Capewell—the world's best nail at a fair price, not the cheapest regardless of quality.

**The Capewell Horse Nail Co.**

Hartford, Conn.

Largest Horse Nail Makers in the World

## FURNITURE PADS

*Made of Tough Soft Drill  
in Government Khaki Color*

STOCK SIZES:

36" x 72"

50" x 72"

75" x 72"

*Burlap, Waterproof Tarpaulins,  
Bags, Etc.*

**FULTON BAG & COTTON MILLS, Inc.**

330 WYTHE AVE., BROOKLYN, N. Y.

Phone: Greenpoint 4200

## A TRIUMPH is your BUCKEYE SILL PIANO TRUCK

*says an owner of four of them*

SELF-LIFTING PIANO TRUCK CO., Findlay, O.



End  
Truck  
Covers

Straps

**Renew the Power and Life of  
Your Engine**

by having the

**Cylinders Reground**

and equipped with new

**Pistons—Piston Pins—Piston Rings**

by the

**Butler Manufacturing Co.**

1124 E. Georgia St., Indianapolis, Ind.

## Your Advertisement In This Space

will be read not only by warehouse and transfer men shipping to your neighborhood but by many national manufacturers looking for distributing facilities

THE SIGN



OF SERVICE

## BALL BEARINGS REMADE

You can reduce your ball bearing bills by exchanging your old worn-out bearings for Ahlberg Remade Bearings. Call on your nearest branch for advice and service.

**AHLBERG BEARING COMPANY** 2636 Michigan Ave. Chicago, Ill.

BRANCHES  
Atlanta, Los Angeles, Portland, Ore., Boston, Minneapolis, San Francisco, Cleveland, New York, Philadelphia, St. Louis, Detroit.

## BAR OUT ALL BOTHER

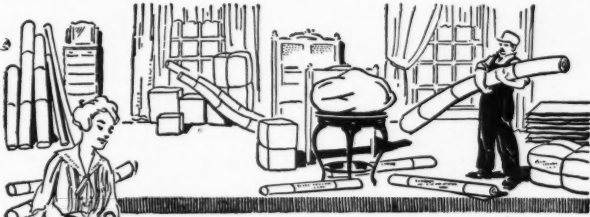
•AND BREAKAGE•

The most dependable defense ever devised against danger or damage is provided in

**HIGGINS QUALITY SPRINGS—For Trucks.** Guaranteed alike at all points. Made without center bolt or hump. Possess resiliency that protects truck. Sturdy strength that gives longest—SAFEST—most economical service. A statement of your requirements will bring proof that Higgins Springs are most reliable and reasonable in cost.

Higgins Spring & Axle Co., Dept. 330 Racine, Wis.

**NO BOLT—NO HOLE—NO HUMP—NO JOLT**



## Better Protection of goods in shipment and storage

The problem of protecting rugs, carpets, draperies, etc., against moths, mice, germs, while in storage or in transit, is solved by the use of

### WHITE TAR PAPER

Made in two grades—Pine Tar and Cedar. Pine Tar for ordinary materials; Cedar for the finest fabrics. Put up in rolls of 12 sheets, each sheet 40 x 48, in full size and in continuous rolls 50 yds. to 1,000 yds. Also heavy tar bag paper cut 5 x 7 and packed 100 sheets to the carton.

We sell *Naphtaline* Moth Balls, Flakes Crystals, Powder and Blocks; Laven-der Compound and Cedar Compound in one-pound and two-pound packages, 100-pound boxes and barrels.

Write today for price list and full information.

**The WHITE TAR COMPANY**  
CLIFF & JOHN STREETS, NEW YORK, N. Y.



## Make This Space Pay

The out-of-reach space is an expense. It shares in the cost of the entire space, but produces nothing. That's the price of hand piling—that and the greater amount of labor such a method requires.

### THE ECONOMY SYSTEM OF STORAGE AND HANDLING Makes Space More Valuable

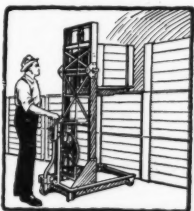
The Economy Tying Machine reaches straight up—up to the highest ceiling and flush with an aisle just wide enough for the pack- age. There's no waste of

space. And there's no waste of labor, either. One man with an Economy does the work of three men or more piling by hand.

The Economy Barrel Rack makes barrel storage space out of space you've been wasting. And it has other valuable features besides.

Write for Complete Facts  
On the Economy System

**Economy Engineering Co.**  
408 S. Washtenaw Av., Chicago  
85-B Murray Street, New York City  
823-B Monadnock Bldg., San Francisco





## BREEN'S PIANO DERRICK

### What Everybody Needs

**PIANO MOVERS** find that the hoisting and lowering of pianos is made easy, safe and economical by the use of this practical, adjustable Window Derrick. Handy to carry, easily put in place by one man, always ready and quickly utilized.

It is a practical, patented invention which has been in use for twelve years and has demonstrated its value beyond question. It clamps to window. There is also a swing under bar which is placed under outer end of piano and carries it in or out.

Every mover of safes, pianos or heavy merchandise needs Breen's Piano Derrick because it saves the strength of the men, means a tremendous saving of time, and obviates jams and scratches. Several firms have taken out third story window, set the derrick in place, hoisted piano, and replaced window in 25 minutes.

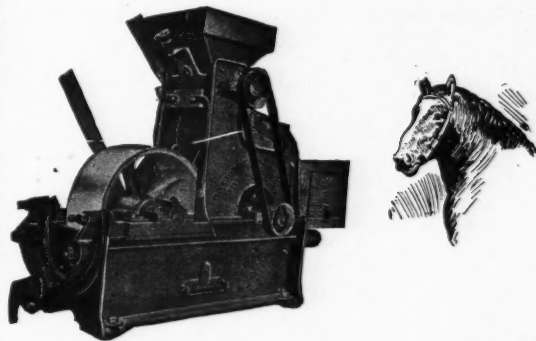
**The Derrick Complete \$35.00**

Also manufacturers of Belts and Bars to hoist Pianos and Ropes, Blocks and Piano Covers

Write to-day. Catalogue for the asking.

**WM. H. BREEN**  
219-231 Rutherford Ave., Charlestown, Mass.





## "Digestion First"

Send for "Digestion First" booklet. A work of art pointing out the road to wealth. Presenting complete records of savings by others and a list of users you know.

**EXCEL MANUFACTURING CO.**  
POTTERSVILLE, NEW JERSEY

Makers of the National Oat Crusher

Made with motor attached or with pulley for belt driving.





## If you don't find what you want here, your advertisement here will find it for you.

This Exchange section serves a real purpose in the industry by affording a central market place for the disposing of equipment no longer needed, and the securing of special apparatus at bargain prices. If you have any equipment for sale or wish to sell your business, this section is the logical place to advertise. All advertisements in this section will be accepted at a flat rate of three cents per word for each insertion.

**PARTNER WANTED.**—By owner of a furniture storage and transfer business. Equipment complete with buildings and new trucks. Now managed by owner with hired help. Full particulars on application. Apply Box 172, care Transfer & Storage, 239 West 39th Street, New York City.

**FOR SALE.**—Good transfer and storage business; one-ton and two-ton truck and good garage and nine-room house on grounds; two brick warehouses, brick and mill construction, 27,000 ft. of floor space, equipped with automatic sprinklers; now managed by the owner, who wants to retire; will sell half or whole thing at less than it cost 10 years ago; this is in a good growing Southern city. Apply Box 170, Transfer & Storage, 239 West 39th Street, New York City.

**WAREHOUSE MANAGER,** successfully operating 100,000 sq. ft. in large Eastern city, desires position with progressive General Merchandise Warehouse. New Company preferred. Thoroughly experienced solicitor and executive; can organize and manage operations. Salary \$3500.00. Address "Manager," care Transfer & Storage.

**WANTED.**—To purchase a transfer and storage established business. Box 177, Transfer & Storage, 239 W. 39th St., New York City.

**WE WANT TO SPEND \$25,000 CASH** for unclaimed merchandise left in storage. We will buy for spot cash. Novelty of all kinds, household specialties, toys, knick-knacks, books, post cards, jewelry, pictures, patented articles, "fool" inventions. Anything of which there is a large quantity. Send sample and say how many you have. Our spot cash offer by return. Address Fantus Brothers, 525 So. Dearborn St., Chicago, Ill.

**TWO-HORSE VANS** for sale in A-1 condition, Donigan & Nielson, makers roller bearing fifth wheel and axles. Ansonia Storage Warehouse Co., 137 West 99th Street, New York City.

**WAREHOUSEMAN** wanted to take full charge buildings, stack goods, check in and out, give access to customers; experienced man with pleasing manner, not afraid of work and willing to live in the suburbs preferred. Full particulars upon application. Apply Box 178, 238 West 39th Street, New York City.

### Don't Forget to Buy

# War Savings Stamps

## in 1919

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# Why—

*Harvey*  
RACINE



*One reason why you should  
use Harvey Springs*

**I**T'S MONEY in your pocket when you can establish a reputation for rapid and reliable service in your neighborhood.

*Another reason why you should  
use Harvey Springs*

The product you use must be of good quality, honestly made.

*Still another reason why you  
should use Harvey Springs*

A product that has made a name for itself and has gained the good will of truck owners is much safer to buy.

A product in which the trade leaders place absolute confidence, a product you feel sure of, conduces to ease of mind regarding your equipment.

*And that too is a reason why  
you should use Harvey Springs*

Service to truck owners, giving satisfaction to your patrons—that is the ideal combination.

*And that is the final reason why  
you should use Harvey Springs*

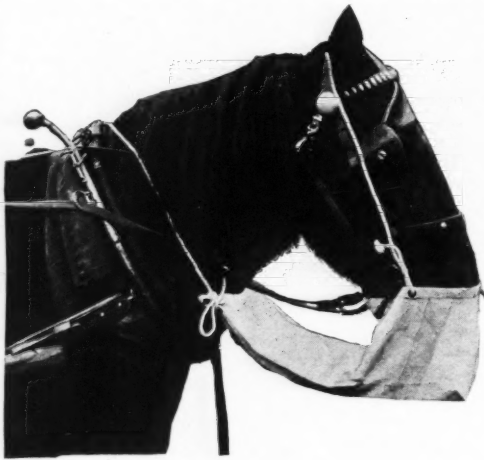
**THERE'S A HARVEY JOBBER NEAR YOU—**  
Write us and we will send you his name and address, and our latest catalog, giving complete specifications of over 900 different styles of Springs.

Write today—you may need Harvey Help tomorrow.

## Harvey Spring & Forging Co.

1918 17th Street, Racine, Wisconsin

**P**RACTICAL ideas, high quality of materials, skilled workmanship and modern manufacturing facilities are combined by the Detroit Canvas Manufacturing Company to make unexcelled products. We solicit the opportunity to demonstrate to buyers in the transfer and storage industry the money saving ideas and practical utility that are built into our canvas goods.



Here is a feed bag that effectually prevents the wasteful scattering of oats because it permits the horse to eat the full ration without shaking his head. Give it a trial.

We manufacture a full line of

## **Water-Proof Storm Covers** for Horses and Wagons **Piano Covers (fleece lined)**

**Furniture and Van Pads**  
**Phonograph Covers**  
**Table Top Pads**

**Auto Truck, Radiator and**  
**Hood Covers**

**Detroit Canvas Manufacturing**  
**Company**

245-247 Larned St., East

DETROIT

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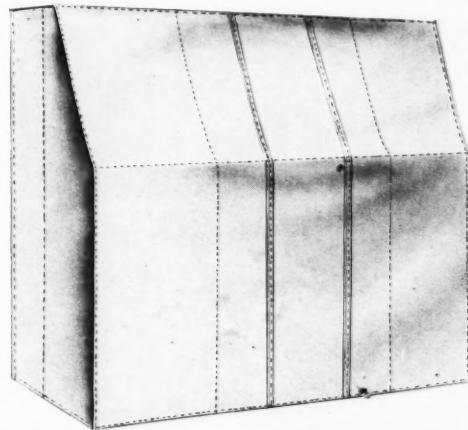
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# SPECIAL



## Piano Covers

(as illustrated)

Heavy Duck, Fleece Lined....\$10.50 Ea.

Imitation Linen (Dust)..... \$4.00 Ea.

PIANO TRUCKS AND FULL  
EQUIPMENT FOR HOISTING

WATERPROOF AUTO TRUCK COVERS  
WATERPROOF WAGON COVERS

## Furniture Loading Pads

TABLE TOP COVERS  
VICTROLA COVERS  
VAN LINER PADS

BURLAP — TWINE — ROPE

Get the Best

## WM. A. IDEN CO.

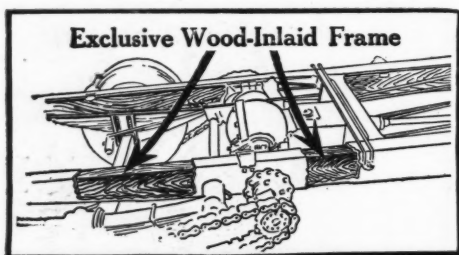
564 Washington Blvd.  
CHICAGO, ILL.

## Write for Prices

# Sterling MOTOR TRUCKS

## For Heavy Hauling Units and Fleets

During 11 years of Sterling service, better engineering, better workmanship, have evolved a haulage unit, giving strength without weight and capacity without burden.



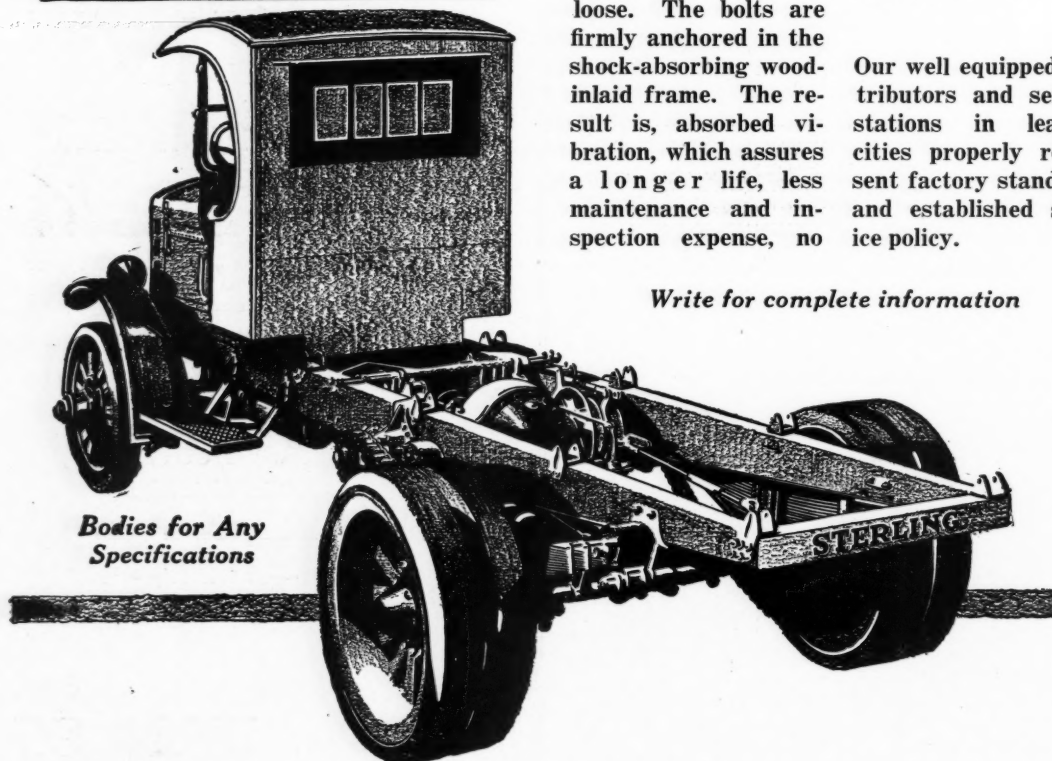
### Wood-Inlaid Frame Means Long Service

We cushion Sterling truck frames with wood. Bolts that stay tight are used in place of rivets that work loose. The bolts are firmly anchored in the shock-absorbing wood-inlaid frame. The result is, absorbed vibration, which assures a longer life, less maintenance and inspection expense, no

rattles and less noise. Built in 2½, 3½, 5 and 7-ton capacities—bodies for any specification.

Our well equipped distributors and service stations in leading cities properly represent factory standards and established service policy.

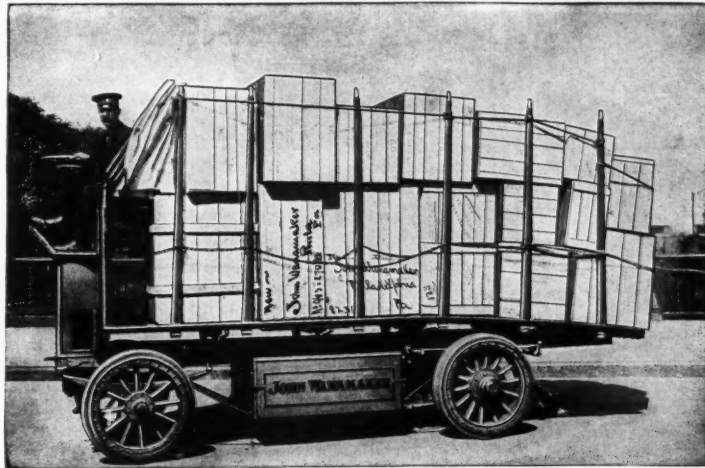
*Write for complete information*



## STERLING MOTOR TRUCK COMPANY

*Builders of Motor Trucks exclusively for eleven years  
Milwaukee, Wisconsin*

# How about your haulage costs?



Know your haulage costs—and you will include electrics in your fleet

**I**S your Transportation Department arranged on the most efficient basis?

Apply the "efficiency engineer" principle of division of labor. The field of the electric is city work, where short hauls, frequent stops and dense traffic are the rule. The electric is supreme in this field—let it do this work. The most economical use of the "gas" car is on long-haul, higher speed runs. Let it do this work.

Remember that the average cost of power for electrics is equivalent to "gas" at 11c per gallon! The saving per year is self-evident.

No little part of the success and economy of electric trucks is due to the use of EDISON STORAGE BATTERIES.

These famous nickel-iron-alkaline batteries have the construction that defies hard service, that stands up and endures.

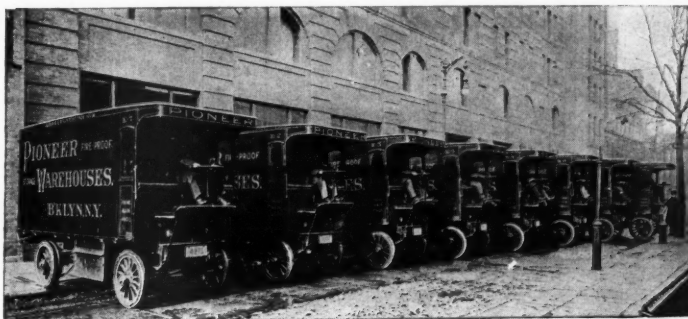
The Edison Alkaline principle is scientifically correct; the battery elements are permanent. Low cost and dependable service year after year is the rule with Edison-equipped vehicles.

*You can apply electrics to your problem. Let us tell you how. Bulletin 500-B on request.*

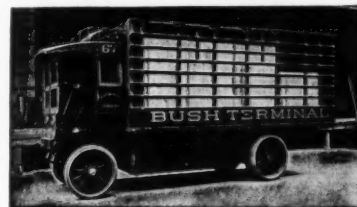
## EDISON STORAGE BATTERY COMPANY Factory and Home Office, Orange, N. J.

### DISTRIBUTORS IN

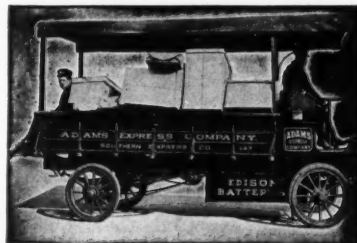
New York	Boston	Chicago	Detroit	San Francisco	Seattle
Los Angeles	Kansas City	New Orleans	Pittsburgh	Philadelphia	



Two-ton trucks of the Pioneer Warehouses, equipped with Edison Batteries



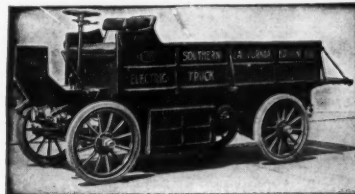
One of a fleet of 42 5-ton trucks in regular use at a large marine terminal



Electrics have proven very economical for express and transfer companies



The upkeep and repair costs of electrics are remarkably low. Simplicity of its power plant and reliability of Edison Batteries ensure this



A type of truck adaptable to many uses

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# White Trucks



## CHOICE OF THE WESTERN TRUCK LINES

**W**HITE Trucks are used exclusively by the Western Truck Lines, the co-operative association established by merchants and manufacturers of Chicago and vicinity for the purpose of providing fast and certain interurban delivery by motor trucks.

The association is managed by men who have had wide experience with trucks. Realizing that dependable and economical trucks were of utmost importance, Whites were chosen in preference to all other makes. Seven 5-tonners, with bodies specially adapted for this class of service, have been purchased.

White Trucks are being used in ever-increasing numbers for inter-city hauling. They have behind them an unparalleled record for endurance in long distance service.



**THE WHITE COMPANY**  
CLEVELAND

*Largest Manufacturers of Commercial Motor Vehicles in America*

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